THE
CORPUSCLE.

OFFICIAL ORGAN OF ALUMNI ASSOCIATION OF
RUSH MEDICAL COLLEGE, CHICAGO, ILLINOIS.
AFFILIATED WITH UNIVERSITY OF CHICAGO.

Rush Medical College,

In Affiliation with the University of Chicago.

* * *

Beginning with the first day of July, 1899, the Academic year of Rush Medical College will date from the first day of July and will be divided into four quarters, designated as the Summer, Autumn, Winter and Spring Quarters. Instruction in all departments of medicine will be given in courses occupying a certain number of hours weekly throughout each Quarter, or, in special cases, for a single term only of half a quarter,

The general course of instruction in Rush Medical College requires four years of study in residence, with a minimum of attendance upon three Quarters of each year. These years are designated as the Freshman, Sophomore, Junior, and Senior years, respectively.

A student may begin his College work on the first day of any Quarter, and may continue in residence for as many successive Quarters as he desires. Credit will not be allowed, however, for more than three successive Quarters.

Instruction is given in two capacious, well-lighted edifices. The laboratory building contains seven large laboratories, in which are conducted the practical courses in

Anatomy, Physiology and Histology, Chemistry
Materia Medica, Pathology and Bacteriology.

The old building is devoted to instruction by **Clinics, Didactic Lectures,** and by numerous important practical courses in **Manual Training** in manipulations and in the use of the instruments employed in medicine, surgery, obstetrics and the specialties.

Manual training in all departments of medicine is a special feature of the instruction in this College. Systematic recitations, conducted in five commodious recitation rooms, are regarded as a most important means of teaching.

With over seventy professors and instructors and with ample room and appliances, this school is able to furnish its classes with the most approved systematic education in medicine.

Physicians and medical students are invited to visit the laboratories and to inspect the educational appliances of this school.

For further information address correspondence to

RUSH MEDICAL COLLEGE, Chicago, Ill.

AUGUST, 1900.

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SEPTEMBER 1900.

THE
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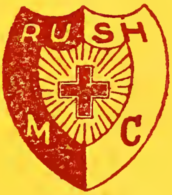

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Vol. X. JULY, 1900. No. 1.

THE IDEAL PHYSICIAN.*

By W. W. Keen, M. D., LL. D.

Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia.

When casting about for a suitable topic on which to address you, I was much perplexed at first, but finally bethought me that perhaps I could not do you a better service than to sketch in very brief outlines the characteristics of the ideal physician. Let me address you therefore as aspirants for the realization of this ideal.

Few of us, perhaps, at the close of life, can say that we have realized our ideals. But unless we have a high ideal, the trajectory of our life will never have risen to any noble height. "Hitch your wagon to a star," said Ralph Waldo Emerson. Even though you fail you will more nearly reach the firmament than if you had never made the attempt.

The physician may be regarded from three points of view: 1, his personal life; 2, his professional life, and 3, his public life.

Personal Life: The ultimate basis of esteem is personal character. Wealth for a time may lend its glamor; intellectual attainments for a time may dazzle the judgment; power for a time may achieve apparent success, but when the testing time comes, as come it must to every man when some great temptation to do wrong confronts him, wealth and intellectual power are as if they were not; character is the one thing that tells in this life and death struggle. Having that, you will win the fight and be crowned with the laurel of victory. Wanting that, you will succumb, defeated and dishonored. The struggle may be a public temptation known of all men, and if you fall your fall will be like that of Lucifer; or it may be hidden in your own breast, known only to God and yourself; but if you win, the victory is just as great as measured by the eyes of Omnipotence, for a character has been saved and strengthened; a true man has attained his growth.

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*The Commencement Address delivered to the students of Rush Medical College, n affiliation with the University of Chicago, June 21, 1900.

It is due, I am glad to say, to this prevalence of high character that our profession has won such a lofty place in the esteem of the community. Its purity is almost never impeached. Remember that every time you are alone with a woman patient in your consulting room, with every eye barred out, she gives her honor into your hands, and in turn you place your reputation unreservedly in hers. A whisper will destroy either of you. In my opinion, it is the highest tribute that can be paid to the character of our profession and equally to the credit of our patients that this mutual confidence is so seldom abused and the tongue of scandal is so seldom busied with noxious tales. When you remember that there are over one hundred thousand physicians in this country with daily possibilities of wrong doing, is it not marvelous that this sacred trust is so jealously conserved? The best asset you have is an unimpeachable character. It is your only defense against false accusation.

Greatness of character finds its best expression in kindness. To no one are so many opportunities for this fine trait given as to the physician. In the heyday of health and happiness he is not needed, but when sickness and weariness and woe come, when the bread winner may be taken, or the loved mother's gentle life may be in peril, or a sweet little child in whom is centered all the tenderness of unbounded love is lying ill, and death seems to dog the doctor's footsteps, then the trusted physician, wise of head and kind of heart, is indeed a welcome visitor. Then can his gentle touch give assurance; then can his sympathetic voice bring hope; then can the thousand and one acts of thoughtful kindness bind to him for life the anxious hearts looking to him as the messenger of life. Even in the daily routine of a hospital clinic, a kind word is often better than any medicine.

Manners make the man. The boor has no place among us. The physician should never be the fob, but always the gentleman; never unclean of clothes or speech, but always neatly dressed and so careful of his words that he need not ask, as did one of General Grant's aids: "There are no ladies present, are there?" "No," was Grant's stinging reply, "but there are several gentlemen." Soiled linen and unclean finger nails are as much condemned by antisepsis as they are by decency. The flavor of stale tobacco smoke about his beard and clothes will never characterize the ideal physician, nor will indulgence in alcohol ever cloud his judgment or disgust his patients.

Make it a point not to let your intellectual life atrophy through non use. Be familiar with the classics of English literature in prose and verse; read the lives of the great men of the past, and keep pace with modern thought in books of travel, history, fiction, science. A varied intellectual life will give zest to your medical studies and enable you to enter not unequipped into such social intercourse as will beget you friends, and it will relieve the monotony of a purely medical diet. Let music and art shed their radiance upon your too often weary life and find in the sweet cadence of sound or the rich emotions of form and color, a refinement which adds polish to the scientific man.

I suspect the next characteristic of the ideal physician will meet with a ready assent—marry as soon as yon can support a wife and the hostages to fortune who will make your home happy beyond compare. But choose wisely and not too hastily. A bachelor doctor is an anomaly. He can not fully comprehend the hopes and fears and desires of parents. He knows not the lions in the path of childhood. Imagine if you can some sweet lassie confiding to him the symptoms of a heart disease which digitalis can not cure. The ideal physician is a good husband and a good father, and so will he enter into the lives and hearts of parents and children, not as a stranger, but as one who can partake of all their emotions, because he has felt the same joys, partaken of the same sorrows, loved as they have loved, and it may be, drunk to the dregs the same cup of loss.

But the ideal doctor lives also a spiritual life. You gentlemen will have to deal with the entrance and the exit of life. You must often ask yourself what and whence is this new *ego* that is born into the world; whither goes the spirit when it quits this tabernacle of flesh which is left to moulder and decay. The tremendous problems of life and death are daily put before you for solution. You cannot avoid them if you would; they are forced upon you by your daily occupation.

As man to man, may I not ask you to give them that consideration which befits the highest problem that can be presented to any human being. That this life, with its hopes and its joys, its diseases and its disasters is all denied alike by reason, and by revelation. He is the best physician who takes account of the life hereafter as well as the life that now is, and who not only heals the body but helps the soul. Let your lives, therefore, be thoroughly religious, religious in your inmost soul, though often you may be denied its customary outward observances. Then shall character, which was my first postulate for our ideal physician, find expression in an ideal altruistic life.

Professional Life. The ideal physician is a member of a learned guid. He should be above the tricks and petty jealousies of trade. True, he lives by his profession, but he who practices for gain is only a hireling and not a true shepherd of the sheep. If you would attain, therefore, to this professional ideal, you must be a constant student, keeping abreast of that scientific progress of which in your community you must be the exponent. You must not be satisfied with the knowledge which you now possess, but you must read, especially the medical journals, or you will be left behind in this day of rapid progress. You must know not only your own language, but must be familiar at least by a reading knowledge with French and German, and if possible with other tongues. He who knows two languages is twice the man he was when he knew only one.

You must not only be skillful, but careful. I have made not a few mistakes in my own professional life, and in reviewing them I can see that for every one made by reason of lack of knowledge and skill, two at least have been committed by haste or want of care. With all our varied instruments of percision, useful as they are, nothing can replace the watchful eye, the alert ear, the tactful finger and the logical mind which correlates the facts obtained through all these avenues of information and so reaches an exact diagnosis, institutes a correct treatment and is rewarded by a happy result.

Be careful in your relations to your patients to deal with them conscientiously. In no other calling is the amount of service to be paid for committed absolutely to the judgment and conscience of the person who is to be paid for his service. Whether you shall make few or many visits is left to your discretion and honest judgment. Sordid motives may occasionally lead to the giving of unnecessary attention. But again it is a glory of our guild that very few physicians betray this trust, and those who do quickly lose their professional standing. Watch yourselves jealously in this respect and never let the greed of gain dull the fine edge of profession honesty.

You will be the father confessor of many a patient. Family skeletons will be unveiled to you alone. The conscientious duty of professional secrecy is given, I am proud to say, into not unworthy hands. True, physicians are sometimes too lax in the repetition of petty gossip, but the profession as a whole is worthy of the confidences so freely given. Be careful, even to reticence, of any betrayal of this trust. Better suffer misconsception and unmerited blame yourselves than your patients.

Be brave men. Your fathers were brave men. When pestilence stalks in the streets and contagion lurks in every chamber of illness, where have the doctors been found? Fleeing from danger with the frighted multitude? Nay, verily. If you wish to find them you seek in the crowded tenements, in the hospitals and in the charnel-houses, there you will find them cheerfully tending the sick, facing disease in the midst of its victims and seeking, even in the bodies of the dead, the knowledge that will make them master of the plague. Witness Rush in the yellow fever of 1797, Gross in the cholera of 1832, Haffkine and Kock in the bubonic plague of the present time. War has given us many fine examples of personal bravery, but pestilence has bred its many quiet heroes who have gone about their daily duty, simply, fearlessly, devotedly. No granite shaft, no enduring brass may mark their last resting-place but the Recording Angel has dropped a tear, blotting out their faults and writ their names high in the roll of fame.

In your professional relations, never forget to be charitable. The best patients you will ever have will be the grateful poor, and your hearts will often find a sincere and grateful glance better payment than any gold. In your relations with other physicians, you will find many opportunities for that same brotherly kindness which is so beautiful a characteristic of our guild. Always extend to other physicians and their immediate families the courtesy of faithful attendance without pecuniary returned. Avoid the petty jealousies, which, I am sorry to say, not seldom estrange physicians from each other. Always believe the best motive unless you know the worst is present. Never say an unkind word of a brother doctor when you can utter a kind one. Try to be just even to those who are unjust to you.

Public Life. In most communities, especially in minor towns and villages, the doctor is one of a small circle of educated men. His scientific studies make him familiar with many public problems, especially those concerning sanitation, the water-supply, the prevention of epidemics, the preservation of the public health, the problems of school life, the fostering of a proper athletic indulgence, the management of prisons, the care of the feeble-minded, the insane, the poor. On all of these questions you must make your voices heard in the communities in which you live or else you give them over to others less qualified than you and only mischief can follow.

No one, perhaps, is more of a leader than the physician in the various philanthropic enterprises of the day. These are closely allied in many respects to the topics just mentioned, and you will be on boards of directors and managers and trustees where you must bring your influence to bear for a wise outlay of charitable gifts and civic appropriations and for harmonizing the antagonistic elements which too often produce discord and confusion. If you combine the qualities which I have sketched for the ideal doctor, you will find that men will easily recognize you as wise leaders whom they will be glad to follow.

My best wish for you is that you may realize in your own lives these characteristics of the ideal physician. It will matter little then whether your life be long or short, for the proper measure of a life is not how long, but *how* it has been lived, and if you attain to old age, when the hairs whiten and the crow's feet begin to show, when your natural forces are abated, you will then not be alone in the world, but will have honor, love, obedience, troops of friends and one Friend above all others, the Great Physician. And when you pass from this life into the next, then shall you be greeted not only by this one great Friend, but by many from whose pathway you have plucked the thorns and briars of this earthly life; many whom through the devious paths of convalescence you have led back to perfect health, to home, husband, father, mother, children; and even if you have not been able to stay the hands of the grim reaper, those too will greet you whose last hours you have soothed amid the pangs of death and have helped through the new birth in the heavenly Jerusalem.

Such Mr. President and Mr. Dean are the ideal physicians that Rush Medical College is sending out into this community every year. But there is a reverse to this picture. Men and women of Chicago! What in return are you doing for Rush Medical College? Chicago is an ideal city for a University. Witness what you have done for the University which is justly your price and has made Chicago munificence known the world over. But in the manifold giving, you have forgotten the Medical School! In spite of what it has done for you, you have done almost nothing for it. Let me, as a friend therefore, speak plainly and show you its record and your duty.

The tide of charity in the United States has reached a remarkable height. The *Chicago Tribune* publishes an annual list showing that in 1899 the charitable gifts and bequests in the United States amounted in round numbers to nearly $80,000,000.

But a small portion of this charity, however, has been bestowed upon medical schools. It is to colleges, theological schools, hospitals, museums, and libraries, that the principal amount has been given.

The courses of study at the medical schools of today, and, therefore, the necessities of the student, are so wholly different from those of twenty-five years ago that it may be well termed a new era in medical education. As a consequence of the broadening and lengthening of the medical course of study, the cost of medical education has enormously increased. The public at large does not at all appreciate this changed condition, and even you, members of the profession itself who may have graduated many years since, scarcely appreciate to its full value the difference. As a consequence, the fees of the students, which can scarcely be raised beyond the present amount, are wholly inadequate for providing a proper medical education, and the medical school appeals, as does the college and the theological and the technical school, for wise and liberal endowments in order to provide this suitable education. "There is no branch of education," says President Eliot of Harvard, "which more needs endowment. Medical education is very expensive, because it has become, in the main, individual instruction. Large lectures and crowded clinics are seen to be of really very limited application, so that year by year the medical teaching becomes more and more costly."

What are the necessities of a medical school twenty-five years ago? Two lecture-rooms, in which seven professors talked, a dissecting-room, and, if possible, a clinic, which was occasionally, but rarely, in a college hospital. Practically the instruction which the student obtained, with the exception of dissecting, was limited to "book-knowlege" and "ear-knowledge." The student was not brought into contact with any patients or any concrete facts, observations, or experiments. He only listened to what his teachers said about them. Millions were given to hospitals in which the sick were treated, but only sixpences to medical schools, in which the men who are to care for their future patients were trained. "Spain," says Lyman Abbott, "in the late war had nineteenth-century guns and sixteenth-century men behind them. We know what come." Our splendidly-equipped hospitals are the nineteenth-century guns. Insufficiently trained doctors are the sixteenth-century men. The time has certainly come when the "men behind the guns" must equal in efficiency the weapons with which they do the fighting.

To perform a tracheotomy and rescue a child suffering from diphtheria is a dramatic occurrence which appeals to every one. To conduct a long series of experiments in the laboratory, by means of which the cause of diphtheria shall be found and the necessity for a tracheotomy avoided, appeals only to the educated few; yet the service done by the operation is a service only to the one patient who may be rescued by the knife, while the other is a service to hundreds and thousands of patients who, for all time, will escape both the knife and the disease. Yet such a series of experiments in preventive medicine brings no reward in money, a limited reward in fame, and only its largest reward in the consciousness of giving a great boom to humanity, for which it can never pay.

The era of the man who simply listened to what his teachers had to tell him and then went on his way, as a "rule of thumb" man, is happily past. This is the era of the trained man and the trained woman, and training means opportunity provided by the community and time, labor and money given by the man.

Let us look for a moment at what a medical school needs. It stands for two things: 1. "Thing-knowledge," instead of "book-knowledge" and "ear-knowledge," teaching the facts of modern science, by scientific methods; that is to say, methods of precision. But 2, no medical school should be content simply with imparting the knowledge that exists. It should push back the boundaries of ignorance and, by research, add to existing knowledge.

The great difference between the modern method of teaching medicine and the older method consists in *laboratory instruction* and *clinical instruction*, both of which must be individual. Laboratories are very costly. They require buildings, equipment, and assistants. The number of laboratories required in the present day in a fully equipped medical school is astonishing. First, the dressing-room—the anatomical laboratory—and along with this a laboratory of histology, and another which may be combined with it, a laboratory of embryology. Next, a physiological laboratory; a laboratory of chemistry and, combined with it, especially, a laboratory of physiological chemistry; in the department of materia medica, a laboratory of pharmacy. Still more important is a laboratory of pharmacology, in which he will learn the action of drugs and be prepared rightly to use them. In obstetrics, a laboratory of practical obstetrics and obstetric operations is essential. In surgery, he needs a laboratory in which he shall be taught all the ordinary surgical operations. In pathology, he needs a laboratory of morbid anatomy, a laboratory of bacteriology, and a laboratory of hygiene. The mere statement of this catalogue of thirteen laboratories will enforce the fact that enormous expense not only for the installation, but also for the running expenses, will be required. To show what one university abroad does, Professor Welch has stated[2] that the Prussian government expends, outside of the salaries of professors in the University of Berlin alone, over $50,000 annually. What American medical school can show anything approaching an endowment which will provide such a sum?

And what has not the laboratory done for us within the last few years. It has discovered the cause of tuberculosis, tetanus, suppuration, cholera, diphtheria, bubonic plague, typhoid fever, erysipelas, pneumonia, glanders and a host of other diseases; it has shown us how to avoid all danger from trichina, so that our entire commerce in hog-products is conditioned upon the laboratory; it has shown us how to banish suppuration, erysipelas, tetanus, and pyemia from our hospitals and reduce our death-rates after operation from 50 or 33 per cent. to 10 per cent., 5 per cent., 1 per cent., and often even fractions of 1 per cent.; it has given us a really scientific hygiene in which we no longer guess but know; it has shown us the role of the mosquito in malaria, of the rat in bubonic plague, of the fly in typhoid fever; it has given us the power to say to diphtheria "thus far shalt thou go and no further," it will give us the power to utter a pæan of victory over typhoid fever, cholera, bubonic plague, tuberculosis, yellow fever, cancer, and other implacable enemies of the human race—and yet there are those who would stay this God-given hand of help!

And the laboratory has had not only its devotees but its heroes. Listen to the story of but one. Dr. Franz Müller, of Vienna, was one of those who in his investigations of the bubonic plague in 1879 contracted the dreaded disease from the bacilli in his culture-tubes. When he became certain that he was infected he immediately locked himself in an isolated room and posted a message on the window pane; reading thus: "I am suffering from plague. Please do not send a doctor to me as, in any event, my end will come in four or five days." A number of his associates were anxious to attend him, but he refused to admit them and died alone, within the time he predicted. He wrote a farewell letter to his parents, placed it against the window, so it could be copied from the outside, and then burned the original with his own hands, fearful lest it might be preserved and carry the mysterious germ. Can you find me a finer example of self-sacrificing altruism? Was ever a Victoria Cross more bravely won?

But the establishment of laboratories, with their attendant expenses, is not the only improvement in our medical curriculum. Every well-conducted medical school requires a large hospital in connection with it. Here must be installed again a fourteenth laboratory of clinical medicine in which all the excretions of the body will be examined, tumors studied, cultures and blood-counts made, or else the patients in the hospital, from the modern point of view, are neglected. It is not too much to say that a patient requiring such examinations, be he the poorest of the poor, has his case scientifically studied, more exactly measured, more precisely treated than most rich patients in sumptous homes.

Again, individual instruction is now carried out in all of our best medical school hospitals by the establishment of small ward-classes, by whom or before whom the patients are examined, prescribed for and operated upon by the professor or instructor, each student bearing a part; and so, by having his investigations directed, his powers of observation cultivated, his mistakes pointed out, his merits applauded, the student graduates from the medical school equipped as none of us, ever had the opportunity to be. All of these laboratory and ward classes imply an enormous increase in the number of assistants, young men striving not only to perfect themselves, but by teaching, to forge to the front so that the best men will win in the struggle for preferment.

Again, the course of study has been prolonged from two years, as it was 20 to 25 years ago, to four years, and in addition the terms have also been lengthened. When I was a a student the course of study consisted of two sessions of about 19 weeks each. or 38 weeks in all. Now the course consists, as a rule, of four sessions of 32 weeks each, or a total of 128 weeks each, an increase of 90 weeks, nearly 3½ times as much as it was 25 years ago. In 1885, 103 schools had courses of two years, and 5 school courses of three years. In 1899, 2 schools had courses of two years, 10 of three years, and 141 of four years.

It can be easily seen that from this additional time required another source of expense has arisen besides the increased number of assistants. The time given to teaching by members of the faculty, as a rule, has been more than tripled, as compared with twenty-five years ago. In addition to this, professors in charge of laboratories must practically give their whole time to the work and are precluded, therefore, from any income from practice. These men must receive salaries sufficient for them to live on.

Surely this statement of the difference between the education given twenty-five years ago, which required but little expenditure of money and resulted in considerable incomes, and the modern methods of education in the laboratory and the hospital, as well as the lecture room, which require enormous expenses, is an ample reason for large endowments.

But, the function of the medical school, as I have said, should not be limited merely to the imparting of existing knowledge. No school is worthy of the name that does not provide for greater or less research work by which substantial additions to our knowledge may be made and the facilities and the results of the healing art made more efficient for the welfare of mankind. Twenty-five years ago there were practically few young men who were fitted for research work. Now every well-equipped school has attached to it, in one way or another, a score or more of young men who are eager for work, longing for the opportunities for usefulness and distinction if they can only obtain a bare living. Our hospitals do a magnificent work in charity, helping the sick and the forlorn, the weak and the suffering in a way which appeals to the charitable instinct of our fellow countrymen, and to this appeal they have responded most generously. *But I venture to say that the medical school which trained a Lister, a Pasteur or a Koch has done more for humanity than all the hospitals of this country combined.* The modest laboratory at Wützburg consisted chiefly of a Ruhmkorff coil, and a Crookes' tube—and Röntgen. Other Röntgens and Listers we have among us if we but knew it.

It is especially in these days that in America we need such researches, for our tropical possessions have brought us face to face with new problems which we can only justly meet by the most careful investigations. It is to our credit that several of our medical colleges have already established schools of tropical medicine, which show that the profession, as well as the public, are rising to the level of our responsibilities and duties.

What now has the American public done for the medical school? Let us contrast it with the endowments in theology. Our academic institutions have such an enormous sum total of endowments that I do not even consider these. Let us, however, compare theology and medicine, remembering that theology is almost wholly a literary study, dealing not with the facts of nature, requiring no laboratories and no large corps of assistants and therefore conducted at a minimum of cost. In 1898 84 theological schools reported endowments of $18,000,000, and 71 schools do not report this item; 19 out of 151 medical schools report endowments of $1,906,072. Five theological schools have endowments of from $850,000 to $1,369,000 each. Yet in 1899 there were only 8,000 students of theology for whom this enorment was provided, as against 23,000 students of medicine. Each theological student had the income of an endowment of $2,250 provided for his aid, each medical student the income from $83. As against 171 endowed chairs of theology there are only 5 in medicine.

I do not grudge a dollar to the theologian, but I plead for his medical brother, that, with a vast more expensive education he shall have a reasonable provision made for his training.

I have already indicated to some extent the direction which these endowments of medical schools should take. They may be classed in three categories: 1. The endowment of professorships. By doing this the salary of the professor would be made available for the other wants of the school.

The endowment may take the form of a memorial, either of the generous donor, or, still better, of some distinguished former occupant of such chair whose name would always add luster to it. 2. The endowment of the laboratories which, as I have indicated, are so costly, both in their installation and in their yearly expenses. 3. The endowment of postgraduate scholarships and research fellowships, these being intended especially for those who will devote their time to original research. Students cannot take much time for original research; their regular studies will absorb all their energies. Research must be done chiefly by young graduates under the direction of stimulating and energetic members of the faculty.

In pleading for these endowments of medical schools, it is but a plea for a return to the profession of a tithe of what they have given. Two years ago I carefully invested the value of the services rendered to the poor in the city of Philadelphia by the medical staff of the Jefferson Medical College Hospital alone, and I found that 129 medical men were then attached to the hospital, and their services, calculated on a moderate basis of ordinary fees, I valued at over $500,000 annually. To a profession which gives freely to the public, surely the public for its own protection may give reasonable endowments to its medical schools. It will be returned to the community tenfold in better educated, better trained and more successful doctors. More devoted, self-sacrificing men and women they never can have.*

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*The latter half of the address consists of portions of my recent address as president of the American Medical Association which by request I reported in order to emphasize the needs of Rush Medical College.

SUGGESTIONS RELATIVE TO TREATMENT OF SYPHILIS.

BY DR. C. TRAVIS DRENNEN, Hot Springs, Ark.

Today we are just as much in need of a more perfect guide by which to be governed in the treatment of syphilis as we were in former years of clinical thermometers for tracing temperature changes in fevers. The disappearance of the symptoms under mercurial treatment, or of the iodides, the so called mercurial diarrhœa the sensation of the teeth being too long upon firm closure of the jaws, salivation and numerous other symptoms tell us that we are benefitting or damaging our patient's health, one or the other—possibly; I use the word possibly, advisedly, for the reason that salivation does not mean in any sense of the word that the patient has had a sufficient quantity of the drug or even the one hundredth part thereof that is requisite to make him well; on the other hand, failure to bring about salivation or even touching the gums after prolonged or limited length of time, does not prove that the individual taking the drug, has not already had entirelo too much, hence if these former guides have proven themselves false can we not get another, one that proves to be truer, better, and a more faithful guide in every respect? To this question I am pleased to answer, in my opinion, yes.

I must tell you that many years ago, I began a series of investigations relative to the blood changes in the syphilitic, and the influence of mercury upon the same. A partial result of these investigations I hope briefly to present to the Alumni Association, reserving the right in future to change or alter the views herein expressed, after a more thorough investigation, should it become necessary.

Examinations were made in 531 cases of syphilis, over 4000 examinations having been made in all during the treatment of these cases. In age they ranged from three months to 73 years. They presented almost every symptom to which a syphilitic falls beir, from mucous patches, to the various forms of nerve, and bone invasion.

I shall not attempt to speak of the many changes which occur in the blood just here, but confine myself more directly to the haemoglobin this I do for the reason that I wish to present, it, as a guide, the most perfect of all guides in my opinion by which to be governed in the treatment of syphilis.

The apparatus used has been that of Fleischel. It is by no means what I should consider a perfect instrument, but after long use, one grows accustomed to it, and I have found it sufficiently correct, to answer all practical purposes. It tells us when the haemoglobin goes up, and when it goes down, and this in turn tells us when our patient is on the road to recovery and when he is growing worse; it tells us if our dose is too large or too small; it tells when to push our treatment, and when not; it tells when to quit, and when to go ahead, in short, it cuts the throat of routinism and lets science have an opportunity to wield her scythe unfettered.

Cabot, on page 268, speaking of the red cells and haemoglobin says: "During the time between the chancre and the secondary symptoms the red cells are slightly decreased, but this is much more marked after the appearance of secondary symptoms and continues for a time even after treatment has begun. The hemoglobin sinks steadily from the time of the primary lesion, but is not specially affected by the eruptions. Even under treatment the haemoglobin never gets quite up to normal and prolonged mercurial treatment lowers it, although mercury has at first a beneficial effect on the haemoglobin as well as the other constituents of the blood.

Konried goes further into detail. According to him, in the first four to seven weeks after infection, the number of red cells remains normal, but the hemoglobin begins to fall off, losing from ten to twenty per cent. in that time. Afterwards it sinks steadily until treatment is begun, the number of corpuscles also falling slightly.

Newmann and Konried, reporting in 1893 on 200 cases, say that up to the time of the secondary symptoms from 25 to 30 per cent. of the haemoglobin is generally lost, without much change in the red cells, which sink considerably in number after outbreak of secondary lesions.

Lezius likewise finds no diminution in the number of red cells which sink considerably in number after outbreak of secondary lesions.

Lezius likewise finds no diminution in the number of red cells until the outbreak of secondary lesions.

All these changes, like those about to be described, are apt to be more marked in women than in men. In cases going on to the secondary stage untreated, the hemoglobin may sink to as low as 25 per cent. In the tertiary stages and in hereditary and so-called "constitutional syphilis" the red corpuscles are much more seriously affected, diminishing considerably in number as well as in weight and color. The hereditary syphilis of infancy may indeed produce fatal anaemia and very low counts are very common, with large numbers of nucleated red cells and great deformities in shape and size.

The effect of mercurial treatments on the red cells is interesting. Gaillard found that the count of red cells increased during the first fourteen days and the haemoglobin during the first twenty four days of treatment. After that time, if mercury is still given, the haemoglobin and later the number of corpuscles begins to decline.

Konried (loc. cit.) found the haemoglobin to rise during the administration of the first 25 to 35 inunctions after which it began to go down. This was a case in which treatment was begun just after the onset of secondary symptoms. In the worst cases it sank even as low as 45 per cent. despite treatment, and this usually means a bad prognosis and severe tertiary symptoms to come. In one of my own cases the haemoglobin was only 37 per cent. though the red cells were 4,988,900. (Color index 37.)

Potassic iodide increase the red cells and haemoglobin, but has no special effect on the leucocytes.

Cases often show spontaneous improvement in their anaemia as well as in other symptoms."

It is observed that Cabot says that the haemoglobin never reaches the normal. Now if he means to imply that it never gets normal at any stage of the disease, then he is wrong; if he means during the so-called secondary stage, then usually he might be considered correct, but not invariably. Concerning this I had the opportunity to show the error of such teaching, to my friend Dr. W. Frank Glenn, of Nashville, Tenn.. more than three years ago. As to the other statements made by the various observers all that I care to say is that they are substantially correct with some few exceptions which I will endeavor to point out.

Before so doing however, I desire to state that it is unfortunate that the above observers did not tell us, how often or in what size doses the mercurial inunctions were given, for, I am positive that dram doses, and ounce doses daily, either one or the other would alter materially the results obtained in these cases. Mercurial inunctions can be given if not in too large doses for more than sixty days, to my personal knowledge without producing any effect upon the haemoglobin save to increase it. That which is true of the mercury is equally true of the iodides, and just here I think it pertinent to suggest that what is the dose for one person, has nothing in common with that required for another, and that one half dram is all that is required in one case daily, while one ounce may be necessary in another.

The method which I have used in making these investigations has been to begin usually with one dram doses daily of ungt hydrg., and after a few days increasing gradually until a half an ounce or more is reached, providing the haemoglobin continues to increase and other symptoms do not prevent our continuation. Just here I would like to say that mercurial diarrhœa will appear in a certain individual from the use of one half dram doses, and to the same patient later on you may be able to more than double a half a dozen times the dose without producing any bad effects.

In three and one half years I have not had a well developed case of salivation and at the same time I have used ungt. hydrg, daily, in doses from ½ dram to an ounce by inunction. the method used in avoiding it is simple.

If we should have our patients scrub the gums from four to six times daily with a good heavy tooth brush and further instruct them to use the index finger or thumb for the purpose of rubbing the gums inside and out, above and below vigorously, several times daily and using some antiseptic mouth wash at the same time, we should have no trouble arising from this source, especially if we should observe the methods heretofore laid down in this paper.

I believe with Clevenger, that the action of mercury is mechanical to say nothing of its chemic effect. and that salivation comes through a shutting off of the blood supply, this taking place by an accumulation of metallic mercury in the lesser blood vessels supplying the jaw, hence producing necrosis or death to the parts involved.

The Corpuscle

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The summer quarter of 1900 has opened under very auspicious circumtances. It must be exceedingly gratifing to the promoters of the system to glance at the enrollment and see the number of names recorded thereon.

The summer session certainly has many advantages of which the other three cannot boast. In the first place much of the clinical material available is of a nature not seen in the colder months. In the second place the number of students being smaller there are better opportunities for seeing and studying cases. And in the third place instruction, because of the smaller sections, are able to pay more attention to individual students and do more individual teaching. The The summer quarter is no longer an experiment. It is safe to predict that in future years its enrollment will equal that of the other sessions.

THE RELATION OF DISEASES OF THE NOSE AND THROAT TO LIFE-EXPECTANCY.*

By E. Fletcher Ingals, M. D., Chicago.

In discussing the relation of diseases of the nose and throat to life-expectancy, I recollect that very few companies in their physicians' certificates ask any questions referring to these diseases, and I presume that less than 3 per cent. of all persons examined for life insurance are subjected to any examination of the upper air-passages. As a general rule, I doubt whether the companies lose anything by this neglect, for it must be admitted that in a large percentage of cases, supposed by the solicitor to be normal, no evidence of defect would be obtained from such an examination; however, there can be no question, among those who have given this subject due consideration, that diseases of the upper air-passages have an important relation to various other diseases of the human economy and that frequently they hold a very close connection to pulmonary affections.

The secondary or tertiary manifestations of syphilis are, in many cases, most easily detected in the fauces. It has been demonstrated that the follicles of enlarged tonsils, in some instances, offer an open door for the introduction of the Koch bacillus, and that endocarditis occasionally results from infection occurring at the same port; and it is generally believed that diphtheria or scarlet fever occurring in a person with enlarged tonsils is more likely to be fatal than under other conditions; therefore, hypertrophy of these glands, aside from indicating certain dyscrasia, may be a predisposing cause to the diseases referred to.

In persons during the prodromal stage of pulmonary or general tuberculosis an almost characteristic anemia is often noticed in the palate, and in the larynx there is frequently an association of some anemia with a uniform through moderate atrophy of the laryngeal walls which is almost pathognomonic. These changes are not sufficient by themselves to justify a positive diagnosis, but they become so impressed upon the physician who is making frequent examinations of the parts that they become a very important sign in the diagnosis of tuberculosis. A somewhat similar atrophy may be noted also in the nasal cavities, during the early stages of pulmonary tuberculosis though it is not likely to be detected in what we have termed the prodromal stage.

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*Read before the Society of Life Insurance Examiners, Chicago, April, 1900.

Chronic laryngitis and tracheitis may be readily discovered by laryngoscopic inspection, and these taken in connection with other conditions have an important bearing, for better or worse, on the applicant's expectancy. In many cases these chronic catarrhal inflammations are the sole cause of hacking cough or hoarseness which may have no relation to lethal diseases; whereas, in other instances, similar conditions are the precursors of serious affections of the lungs or circulatory organs. Although the examiner, in many instances, could not differentiate accurately between these two classes, yet the discovery of the catarrhal condition would lead to a more careful examination of the chest which would occasionally disclose an incipient pulmonary lesion or cardiac disease. Paralysis of one vocal cord would cause the examiner to inquire critically into the symptoms and to search carefully for the physical signs of aneurysm of the aorta or other causes of pressure on the recurrent laryngeal nerve.

Hypertrophic rhinitis is found associated with, or as a cause of deterioration in the vitality which reduces very considerably the individual resisting power, and, therefore, to some extent militates against his chances for long life. This same condition and nasal mucous polypi have frequently been found to be the causes of spasmodic asthma, an affection which conservative companies put down as one of the personal reasons for rejection. In rare instances prominent, sharp deflections of the septum have been shown to be the cause of epilepsy, another disease which would make it impossible to obtain insurance in a safe company.

In a paper presented to the British Medical Association in 1897, I showed that the great majority of the so-called catarrhal affections of the nose can have no possible relation to pulmonary tuberculosis, but that on the contrary there was some reason for suspecting that persons subject to a cartarrhal condition of the mucous membranes of the upper air-passages were less likely to have pulmonary tuberculosis than others. An exception, however, obtains to this statement in persons suffering from atrophic rhinitis, which affection in its decided manifestations has been found in quite a large percentage of cases associated with pulmonary tuberculosis. Quoting from the paper referred to: "Out of 830 private cases of pulmonary tuberculosis in which the records were complete, 237 suffered also from nasal disease, amounting to only a trifle over 28 per cent., although about 75 per cent. of the human family suffer from nasal disease. It is also shown that in about 71 per cent. of the phthisical patients who were credited with having nasal catarrah, or in about 20 per cent. of the whole number of cases studied, the affection consisted of exostosis of deflection of the septum, a condition that exists so often in healthy people (50 per cent.) that we cannot count it of any importance in the causation of consumption. In other words, while 50 per cent. of the Caucasian race have these diseases of the septum they are fonnd in only a little over 20 per cent. of the persons who have pulmonary tuberculosis.

"If the claim is to be admitted which is made by some authors, that in these 20 per cent., the exostosis caused the tuberculosis then it must also be admitted that in the remainder of the 50 per cent. the exostosis was responsible for various other conditions; for example, in 8 per cent. the exostosis may have caused malaria; in 12 per cent. typhoid fever and in 10 per cent it may have made the person bald. Of the remainder, 29 per cent. were subjects of atrophic rhinitis, which, considering the comparative infrequency of this disease, would lead us to suppose that there might be at least a similarity of causes for this and for tuberculosis."

In many cases ot well-marked tuberculosis, we may find very distinct atrophy of the soft tissues in the nasal passages, and in a considerable number we will find atrophy of the laryngeal tissues, though in the majority we will have more or less characteristic swelling or ulceration of the larynx.

From these considerations it appears to me that usually examinations of the nose and throat would not aid the life-insurance examiner, but that in a limited number of applicants a thorough examination of these parts would enable him to reject person otherwise acceptable, who within one or two years will develop diseases that very greatly shorten their expectancy; therefore, such examinations should be made whenever the hereditary or personal history, the general appearance or a quick pulse, lead the examiner to suspect the beginning of pulmonary or cardiac disease.—*Phila. Med. Jour.*

EXAMINATION QUESTIONS.

The following questions were presented at a recent examination of candidates for license to practice medicine in Illinois:

ANATOMY.

1, Name and locate the muscles of the eyeball. Locate and describe the ileocecal valve. 3. Give the origin and distribution of the median nerve. 4. Name the membranes of the brain and spinal column. 5. Describe the heart. 6. Give origin and insertion of the gastrocnemius muscle. 7. Describe the alimentary canal from the duodenum down. 8. Describe the arch of the aorta. 9. Name the articulations of the malar bone. 10. Describe the anterior tibial artery.

BACTERIOLOGY AND PATHOLOGY.

1. How would you determine the presence of the tubercle bacilli in a specimen of sputum? 2. Give the characteristics of the bacillus tetani. 3. What are supposed to be elements of resistance or protective forces possessed by the human body against parasitic infections and intoxications? Give the characteaistics of the malarial organism. 5. Name the six pus cocci. 6. What is the pathology of chronic endocarditis? 7. What is the histologic structure of sarcomata? 8. What is the pathology of locomotor ataxia? 9. What are the blood changes in anemia? 10. What is thrombosis? What is embolism?

CHEMISTRY.

1. What is analysis? 2. Define simple or elementary and compound matter. 3. What is the principal atom having linking functions? 4. What two kinds of molecules can be chemically distinguished? 5. How are multiples of atoms expressed in chemical notation? Example. 6. What is a base? 7. What is the difference between an atom and a molecule? 8. When are traces of albumin indicative of renal lesion? 9. What is the function of hemoglobin? 10. Give Haines' test for sugar in urine.

GYNECOLOGY.

1. Describe the minute structures of the endometrium.

2. Give the nerve and blood-supply of the ovaries. 3. What are the causes of sterilty? 4. How would you give a vaginal douche? 5. What is the treatment for acute pelvic peritonitis? 6. How would you diagnosticate a small subperitoneal fibroid of the uterus from a salpingitis? 7. Give the successive steps in the operation for curettage for the uterus. 8. What are the causes of dysmennrrhea? 9. What disease of the uterus may result from childbirth? 10. What is the treatment for carcinoma of the uterus?

HYGIENE.

1. Wells, cisterns, lakes and rivers are the usual sources of drinking water. In your judgment, from which of these sources is the water more desirable and why? 2. Name some of the sources of contamination of lake and river water. 4. Give a concise statement of the means to which you would resort to prevent contamination of drinking water in the several ways mentioned. 5. Mention some of the more usual constituents that render drinking water unfit for use. 6. What bacilli usually found in water show evidence of fecal contamination? 6. What physical properties may drinking water present to the senses and yet be nonpotable?. 8. Give as full a list as you can of diseases traceable to water contamination. 9. Why are cases of typhoid fever rare in a new country, and why common in an old settled country? 10. In contrast to typhoid fever, why is malarial fever common in newly settled countries and relatively rare in old?

MATERIA AND THERAPEUTICS.

1. Name four of the most important cardiac tonics and describe their physiologic action. 2. State the difference between a cholagogue and hepatic stimulant, also name examples of each. 3. Give the dose of fluid extract of ergot and describe its therapeutic action. 4. Name the alkaloids of nux vomica. 5. Describe the therapeutic and physiologic action of gelsemium and give the dose of the tincture. 6. What is Dredé's ointment, and in what cases would you recommend its use? 7. Describe the action and use of bromoform, and give the dose for a child 2 years old. 8. What drugs contraindicate the use of oils and fats in case of poisoning? 9. What would you do in a case of poisoning with Paris-

green? 10. Write a prescription for a child suffering from membranous croup and outline the general treatment.

MEDICAL JURISPRUDENCE.

1. As regards cause, the subject of abortion has been divided into natural, artificial and criminal. A woman has aborted under somewhat suspicious circumstances. Name some facts that would induce you to think the abortion belonged to the class natural. 2. Some that would indicate the class artificial. 3. Some that would cause you to suspect criminal intent. 4. Name some conditions that would justify the bringing of an artificial abortion. What authority should be secured? 6. In case of death following criminal abortion how would you go about establishing the fact? That is, what proofs would you expect to find? 7. An infant, evidently of recent birth, is found. A woman is produced who is said to be its mother. In case of an examination what proof would you expect to find in the alleged mother's condition? 8. And in the event the mother had in the meantime died, what further proofs of maternity upon post-mortem would you expect to find? 8. To satisfy a legal inquiry it is sometimes necessary to ascertain whether a woman has borne children at a more or less remote period. How could this fact be proven? 10. How soon can one pregnancy follow another? And what is the shortest time on record between two conceptions?

OBSTETRICS.

1. What are the blood changes in pregnancy? 2. What is the treatment of varicose veins in pregnancy? Which vein is always first affected? 3. What are the varieties of uterine contractions? 4. What is the danger if the external and internal os uteri contract without the uterus contracting itself? 5. How would you assist in delivering the head, pelvic presentation? 6. What is "hour-glass" contraction of the uterus? How would you treat such a case? 7. What is retroversion of the uterus? What are the effects of retroversion and what is the treatment? 8. What would you do if the head was arrested in the inferior strait, pelvic presentation? 9. How would you diagnose a case of shoulder presentation? How would you treat such a case? 10. What is placenta previa? Give treatment.

PHYSIOLOGY.

1. From what layer or layers of the blastoderm is the liver developed? 2. What nerves control the action of the heart? 3. Give the minute anatomy of the large intestine. 4. Describe the colored and colorless blood-corpuscles: *a.* As to proportion. *b.* As to size and composition. *c.* As to function. 5. Describe the respiratory changes in the blood and tissues. 6. Describe the nervous apparatus of respiration. 7. Give summary of the digestive changes in the large intestine. 8. Describe the two kinds of supporting material for the medullated nerve fibers of the white matter of the spinal cord. 9. Name the different columns and tracts of the spinal cord and which are of ascending and descending degeneration. 10. Give in full, the distribution of the gray matter in both brain and cord

PRACTICE.

1. Name the diseases with which uremia may be confounded and give diagnosis and treatment. 2. Give causes, symptoms and treatment of acute neuritis. 3. Etiology, pathology and physical signs of eccentric hypertrophy of the heart. 4. Give the differential diagnosis between serofibrinous pleurisy, lobar pneumonia and phthisical consolidation of the lung. 6. Chronic dilation of the stomach, its causes, physical signs, symptoms and treatment. 7. How would you diagnose a case of bubonic plague? 8. Give the differential diagnosis between variola and varicella and outline the general treatment of the former. 9. The causes, symptoms, complications and differential diagnosis of scarlatina. 10. Write what you know of cirrhosis of the liver.

SURGERY.

1. What is hydrocele? Give treatment. 2. What are the main treatments of fractures? 3. What is adhesion and what is effusion? 4. What are aneurysms? How do you treat them? 5. What are the indications for ovariotomy? 6. How do you treat lateral curvature of the spine? 7. Enumerate the different classes of fractures. 8. What is Pott's disease? Give treatment. 9. What symptoms characterize joint wounds? Outline your treatment. 10. Describe amputation of the knee-joint, lateral flap operation.

COMMENCEMENT.

ORDER OF EXERCISES.

I. OVERTURE - - - - - - - *Von Suppe*

II. THE PROCESSION

March - - - - - - - . *West*

MR. A. F. MCCARRELL
ORGANIST

The Graduating Class
The Faculty of the College
The Official Guests of the Commencement
The Faculty of the University
The Trustees of the University and of the College
The Dean of the Faculty
The President of the Board of Trustees
The Commencement Chaplain
The Commencement Orator
The President of the University

III. THE PRAYER
The Commencement Chaplain,
THE RT. REV. CHARLES EDWARD CHENEY, D. D.
BISHOP OF THE SYNOD OF CHICAGO

IV. THE PRESENTATION OF CANDIDATES FOR THE DEGREE MEDICINÆ DOCTOR TO THE TRUSTEES AND FACULTY, BY THE SECRETARY OF THE FACULTY.

V. MUSIC
"Intermezzo" . . . . . *Mascagni*

VI. THE CONFERRING OF DEGREES

VII. MUSIC
"Serenade" . . . . *Clark*

VIII. THE AWARD OF FELLOWSHIPS, AND OF HONORS
The Fellowship of Pathology—THEODORE TIEKEN, M. D.
The Fellowship of Chemistry—CHARLES SAMUEL WOODS
The Fellowship in Materia Medica and Pharmacology – CHARLES ELLIS SHULTZ

The Fellowship in Medicine—Alexander Francis Stevenson, M. D.

The Fellowship in Surgery—Harry Wendell Horn, M. D.

The Edward L. Holmes Scholarship at Wood's Hall—Martin H. Fischer

The Benjamin Rush Medal—Oscar Adolph Dahms

The J. W. Freer Medal—Frank M. Wood Jr., A. B., of the Class of 1901

The L. C. P. Freer Medal—Frederick Greenbaum, of the Class of 1902

The Daniel Brainard Medal—Don Henry Palmer, of the Class of 1903

Honorable Mention—Frank M. Wood, Jr., A. B., of the Class of 1901

The DeLaskie Miller Prize—Geo. White McClure

XI. Music
"Canzonnetta" . . . . *Brewer*

X. The Doctorate Address—"The Ideal Physician"
Professor William W. Keen, M. D., LL. D.
OF JEFFERSON MEDICAL COLLEGE, PHILADELPHIA

XI. Music
"Allegro" . . . . *Batiste*

XII. The Benediction
THE COMMENCEMENT CHAPLAIN

XIII. The Recession
March . . . . *Tombella*

FACULTY AND ALUMNI BANQUET.

MENU

Little Neck Clams

Consomme Marquise
Relishes

Whitefish, Mornay Gratin
Potatoes Pont-Neuf

Tenderloin of Beef, Portugaise
Stuffed Tomatoes

Siberian Punch

Roast California Squab
Salade

Tuti-Frutti Ice Cream

Cakes Cheese Coffee

PROGRAM.

Prof. HENRY B. FAVILL,
Presiding.

PHYSICAL AND SOCIAL THERAPEUTICS"	Prof. Albion W. Small, University of Chicago.
MUSIC, "Serenade"	Tomaso Mandolin Orchestra.
"OUR MEDICAL IDEAL"	Prof. J. Glarence Webster.
SONG	G. W. Hardie
"PRE-MEDICAL EDUCATION."	Prof. Stanley Coulter, Purdue University.
"SURGERY OF THE NINETEENTH CENTURY."	Prof. Wm. W. Keen, Jefferson Medical College, Philadelphia, Pa.
MUSIC, "Union League."	Tomaso Mandolin Orchestra.
"THE RELATION OF THE HHYSICIAN TO HUMAN PROGESS."	Dr. E. Benson, Class of '00.
SONG	G. W. Hardie.
ADDRESS	President Wm. R. Harper

A CORRECTION.

In the *Railway Surgeon* of Feb. 20, 1900, the following appears:

"Principles vs. Methods in Railway Surgery," by Dr. Bouffleur, which appeared in the *Railway Surgeon* of Jan 23, 1900, was the uncorrected report of some remarks made before the Iowa State Association at Ottumwa, Ia., Oct. 12, 1899. We had supposed it was presented as a paper and therefore printed it as received, but have since learned that the remarks were recorded by a gentleman unfamiliar with medical reporting, which accounts for the number of obvious errors and incorrect statements which appear therein.

As the contribution referred to appeared verbatum in the April issue of the CORPUSCLE we feel that this correction is due both Dr. Bouffleur and our readers.

A NEW CLINIC.

An electro-therapeutic clinic was opened in Rush Medical College about the middle of January, under the direction of Asst. Prof. Patton, with Dr. W. B. Sprague as assistant. The clinic room is fairly well equipped with apparatus, furnishing the constant, induced, static, sinusoidal and cautery currents in their various modifications. The purpose of the clinic is to fill the prescriptions for electrical treatment from all the other departments of the College and from the Central Free Dispensary. Many departments at once availed themselves of it, an average of eight patients a day having been referred, and a gradually increasing interest is manifest on all sides.

Appended is a report of a few cases of interest which have completed or nearly completed a course of treatment. Many other cases under treatment are still more interesting and may be reported when results are fully established.

TRAUMATIC MYOSITIS AND SYNOVITIS.

Mrs. O., aged 55 years. Referred to the clinic by Prof. Senn, March 22, 1900. Had received a fall from a ladder three months previously, and in trying to save herself she wrenched her right shoulder and arm severely. She experienced but little discomfort at first, but severe pain gradually developed and at the end of three weeks she was obliged to seek medical advice. Her physician bound it up, rendering it immobile. The pain increased until she was sleepless at night and miserable by day, and at the time of consulting Dr. Senn, she could raise the hand only to her neck and could not place it behind her waist, every effort aggravating the pain.

On admission to the clinics both heads of the biceps could be felt as large, dense cords, and the whole muscle and shoulder were swollen and sensitive, pressure over the joint also eliciting severe pain.

The steady induced or sinusoidal currents and massage were applied three times weekly until the pain was nearly relieved and she could rest well at night, and then the current was interrupted by a rheotome to exercise the muscles, and passive movements of the arm were added. She can now, June 30, use her hand to do her hair in a coil on top of her head and can put it well behind her, but cannot yet rotate it in the latter position. The hardness and swelling have disappeared. She has no pain except in a strained position. She has had 37 treatments. Treatment is continued at long intervals with expectation of perfect recovery in the near future.

TRAMUATIC NEURITIS.

Mr. C., aged 40 years. Referred to the clinic by Prof. Senn, Feb. 5, for faradism and massage of left arm. He had suffered from fracture of left scapula and clavicle, which, in healing, had left much pain, considerable immobility and finally atrophy in muscles of shoulder and arm. He could not lift a weight of even two or three pounds with the left hand. He began to improve very soon and returned to his work about May 5th, after 32 treatments. A month later he reported to the clinic that he had perfectly recovered the use of the arm and shoulder, and had no pain whatever. No atrophy was apparent. In both this and the preceding cases there was no tendency to recovery on admission, but rather the contrary.

HYPERPLASIA AND PROLAPSE OF THE UTERUS.

Mrs. R., aged 37, was referred by Dr. Adolphus, Feb. 5th, for interrupted induced current intra-uterine. She suffered from subnivolution following labor several years ago, and has had the usual treatments for such a condition for the past five years, with but little improvement, though the misplacement was partly corrected by a pessary. On admission the uterus was fully twice the normal size and the ligaments stretched and lax. She has received 31 treatments July 30, and has improved from the first treatment. She has not worn the pessary for two months. The uterus is contracted to nearly the normal size and remains in a normal position. Contractile tone of the ligaments and vagnial wall is manifest to digital touch. She needs but little more treatment.

COLLEGE NEWS.

The Senior class numbers over one hundred members.

The dissecting room will be converted into an amphitheatre, to be used for all anatomical demonstrations. The work will be completed in time for the Fall quarter.

Prof. Hyde is spending the summer in Europe.

The International Association of Railway Surgeons held its 13th annual meeting in Detroit May 30, 31-June 1st. Prof. A. I. Bouffleur was president.

Prof. Norman Bridge has a readable paper on "Some Psychological Aspects of the Practice of Modern Surgery," in the *So. California Practitioner* for May.

Papers by Profs. Moyer and Webster read at the recent meeting of the Illinois State Medical Society, may be read in the June number of the *Ill. Med. Jour.* The former's is on "Tendencies of Modern Medicine," the latter's on "Selected Topics in Connection with the Pathology of Delivery."

Prof. D. R. Brower delivered the address to graduates, at the recent commencement exercises of the medical department of Georgetown University, Washington, D. C.

Drs. Ricketts and Wells presented papers at a recent meeting of the Chicago Pathological Society.

Assistant Prof. Wescott is holding some very interesting clinics in Ophthalmology.

At once clinic recently Prof. Fenger presented three cases of carcinoma of the lower jaw.

Students in the summer quarter are enjoying the advantages of excellent clinical material.

During the absence of Prof. Hyde, Associate Prof. Montgomery is conducting the clinics on diseases of the skin.

Dr. D. Lee Shaw has accepted the chair of Anatomy in the College of Physicians and Surgeons. Dr. Shaw was one of the most popular instructors we had. He is greatly respected as a gentleman and a teacher. It is with mingled feelings of regret and pleasure that Rush men learn of his promotion. Prof. Shaw has the best wishes of the students for success in his new surroundings.

The Michigan and the Northern Peninsula Medical Societies held a joint meeting at Mackinac Island, June 10th and 11th. Prof. Billings delivered an address on the Diseases of the Stomach, and Prof. Bouffieur contributed the address on the Surgery of the Stomach.

ALUMNI NOTES.

'97. Dr. T. R. Crowder has published "A Contribution to The Pathology of Chronic Hyperplastic Tuberculosis of the Cecum, based on the Study of two Cases, in one of which Carcinoma of the Cecum Coexisted." It is in the *The Am. Jour. of The Medical Sciences* for June.

'97. Dr. Albert Sabin, Kirkman, Iowa, has recently been admitted to practice in that state.

'96. Dr. Morley D. Bates, who has been at Terry, S. D., with the Homestake Mining Co., since his service as interne in the Presbyterian Hospital, has opened offices at Halsted St. and Jackson Boul., Chicago.

'94. Dr. C. D. Center, Quincy, Ill., is favored with the publication of his photograph in the *Medical Standard's* write-up of the recent meeting of the Illinois State Medical Society.

BOOK NOTICES.

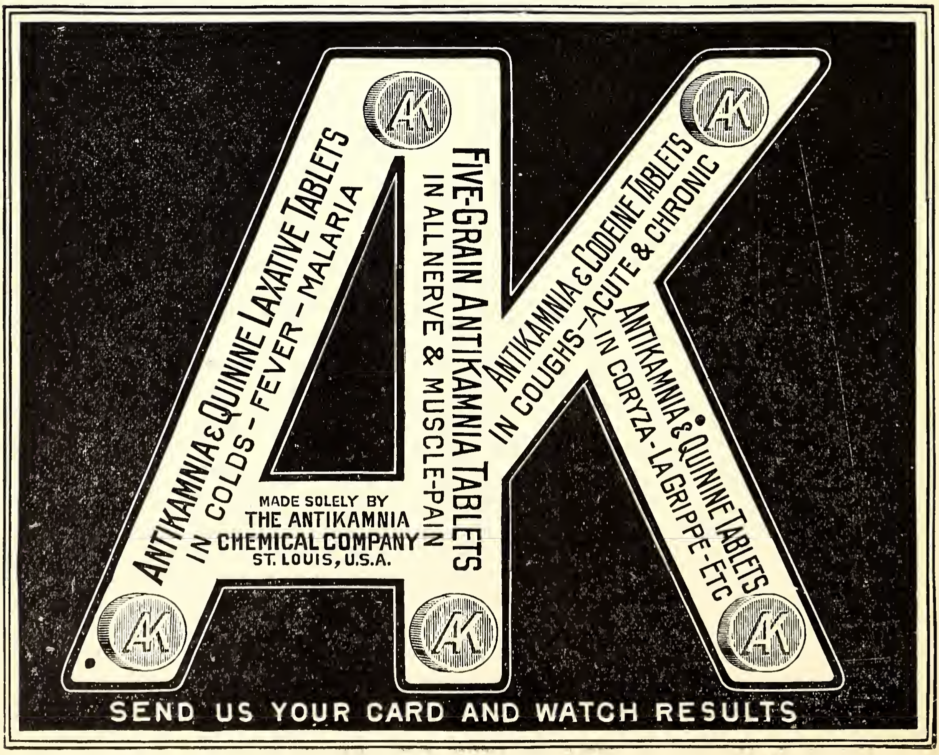
Lessons on the Anatomy, Physiology and Hygiene of Infancy and Childhood. Consisting of Extracts from Lectures given at Rush Medical College, by ALFRED C. COTTON., A. M., M., D. Professor of Diseases of Children; Accoucheur and Physician for Diseases of Children Presbyterian Hospital; Staff Member of the Central Free Dispensary and the Cook County Hospital; President of the Chicago Pediatric Society; Member of the American Pediatric Society, etc. Octavo—175 pages. DOCTORS' MAGAZINE PUBLISHING COMPANY, Chicago—1900.

This book fills a long felt want for a concise presentation of accepted facts in this important field of study. The work is the only one in the English language which deals with the subject. As the title suggests, its mission is to give both student and practitioner a foundation in the anatomy, hygiene and pathology of infancy and childhood—and well does it fill its mission.

The book is especially rich in illustrations and photographs which in themselves will repay the purchaser. The photographs are of typical cases and well demonstrate the lessons of the text.

There are unfortunately several minor typographical errors, which are probably explained by the fact that the book was hurried so as to appear in time to be of use to the author's students.

To those who have known this eminent teacher of pediatrics during the past twenty years, no further introduction of his work is necessary.



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The Corpuscle.

Rush Medical College, Chicago, Ill.

In Affiliation with the University of Chicago.

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CHRONIC LACUNAR TONSILITIS.*

By Charles E. Clark, M. D., Rush '86, Kansas City, Mo.

Professor of Clinical Larynology, Kansas City Medical College.

One is required to pursue his investigations to but a limited extent until fully impressed with the crudeness displayed in the classification of chronic inflammatory affections of the faucial tonsil, notwithstanding the great amount of literature upon the various affections of the lymphoid ring. Doubtless there is at least a shadow of excuse for the apparent assumption by many practitioners of medicine that about all there is to a clear understanding and proper treatment of chronic inflammatory affections of the tonsil is to recognize one which is hypertrophied to the extent of projecting beyond the palato-glossal fold, and excise it; permitting one of a lesser magnitude to be dismissed as not requiring treatment.

While it is foreign to the scope of this paper to do more than treat in a brief manner of chronic lacunar tonsilitis, yet it might be well to suggest for further study the following outline of simple inflammatory affections of the faucial tonsils:

Tonsillitia.
- Acute.
  - Interstitial.
  - Peritonsillitis.
    - Suppurative or Non-Suppurative.
  - Lacunar.
- Sub-Acute
- Chronic.
  - Hypertrophy.
    - Fibrous or Hyperplastic.
    - Adenoid or Hypertrophic.
      - Free.
      - Flat.
      - Adherent.
  - Lacunar.

histology or physology of the faucial tonsil, it is well to recall that they are two aggregations of crypts or lacunæ formed by simple involutions or sacs of mucous membrane, opening upon the surface by from twelve to eighteen slit-like orifices. Beneath the surface these ducts become subdivided forming a great number of lesser ducts, all opening upon the surface through a common outlet. Ranged around these crypt walls are a great number of lymph-follicles, the leucocyte-manufacturing centers.

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*Read before the Jackson County Medical Society, Jnne 8, 1799.

Hill concludes "that the tonsils are leucocyte-secreting organs, * * * * * * and that the leucocytes which pass by diapedesis from the lymph-follicles into the crypts act as phagocytes or 'scavengers' in the mouth and pharnyx."

If we accept this view of their function and consider that they are situated at the portal through which both the respiratory and digestive organs receive their varied supplies, it is but little wonder that we have occasion to study their diseases.

Roe emphasized the importance of a careful stndy of chronic lacunar tonsilitis in a paper before the American Laryngological Association in 1889, in which he describes them as "diseased tonsils unattended by hypertrophy." They have also been described by Sokolowski and Dmockoweki under the name "chronic desquamative lacunar tonsilitis," which is probably one of the most appropriate names yet suggested. Bosworth describes the same disease under the name "croupous tonsilitis."

Whatever name we care to use, it is sufficient to remember that the disease is a chronic inflammation of the tonsilar lacunæ, unattended as a rule by any considerable hypertrophy of the stroma of the organ, and commencing as either a chronic affection from the first, or as a result of repeated acute or sub-acute attacks.

The exudate presents a cheesy appearance, and under the microscope is found to contain fine fibrinous fibrillæ, epithelial cells and leucocytes.

Fraenkel discovered the presence also of the staphylococcus pyogenes aureus and albus, while Gabbi found the encapsulated bacillus of pneumonia.

Sometimes the crypts become occluded, causing a retention of the secretions, which undergo decomposition, causing marked local and systemic disturbance of a septic character

The diagnosis of these cases must never be made except after the most careful examination under reflected light.

Cocaine in weak solution should be sprayed into the pharynx, after which, with depressor, retractors, small curettes, probes, etc., each portion of the tonsillar space should be carefully examined and each crypt explored.

With an examination short of this it is only a matter of time until the practitioner will find himself greatly humiliated in having overlooked an immense follicle filled with fetid secretion, which evacuates itself at just the time to prove most embarrassing.

Permit me to cite one case as illustrating this disease in a somewhat aggravated form.

Mrs. Nellie M——, city; married, aged 28 years; height, 5 feet 1½ inches; weight, 115 pounds; first presented for treatment in February, 1897, in company with her family physician, Dr. S. A. Dunham. Her general health was good until 12 years of age, when she suffered from an attack of acute articular rheumatism, which confined her to bed for three months. Six years later she suffered another attack complicated with pneumonia. This confined her to bed for about the same length of time.

Since the first attack of rheumatism she has suffered from palpitation of the heart and at present has a slight mitral insufficiency. Her general health has also been considerably impaired during this time. She has been subject to frequent attacks of acute sore throat since childhood.

About eight years ago she first noticed cheesy formations in the crypts of the tonsils. This condition continued, gradually growing worse, with an increasing disposition to accumulate, decompose, and become offensive. After one year of suffering, she consulted one of the leading and most capable laryngolists of this city, who treated her for a period of six weeks, making applications of the galvano-cautery to the tonsillar crypts, after which she was directed to continue the local application of a solution of copper sulphate. She experienced no benefit from the treatment. The accumulations continued, causing excruciating pain with general septic infection; the temperature frequently reaching 102° and 103° F.

During these attacks she sought and obtained temporary relief at the hands of her family physician; who, however, advised from the first that she consult a laryngologist with a view of undergoing an operation for a radical cure.

Like many sufferers from chronic maladies, however, she was not only depressed in body, but spirits as well, and delayed active treatment until the date above mentioned.

At this time her weight was reduced to 93 pounds, her skin sallow, and her general health poor.

Examination with the throat in a passive condition revealed but little pathological disturbance, certainly nothing in keeping with the severe constitutional symptoms noted. The tonsils were enlarged to about the size of an almond kernel and presented the appearance of being a mass of cicatrical tissue; evidently the result of the repeated cauterizations to which they had been subjected.

With a slender probe deep crypts or sinuses could be detected extending in several directions in each tonsil.

The patient had acquired marked dexterity in the manipulation of her throat, and with slight pressure and movement of her finger upon the tonsil she could press out great quantities of fetid cheesy or purulent material.

It was at once apparent that the usual treatment of cautery or chemical applications to the crypts was entirely inadequate for this case. Accordingly and with the assistance of Dr. Dunham, after cleansing and cocainizing the parts as thoroughly as possible, we fixed the glands with a slender pair of forceps, and with a long handled pair of scissors curved upon the flat carefully dissected out every portion of cicatricial and gland tissue which could be seen. After the parts had healed, deep sinuses could be detected in several directions, the most marked being one upon each side extending upward and external to the junction of the anterior and posterior pillars for a distance of fully one-half inch.

These were in turn treated by passing a small, slighly curved galvano-cautery electrode to the bottom of each crypt, making connections, and burning out through the side in the most superficial or suitable direction. Her treatment was carried on somewhat irregularly, and consequently extended over several months, but at this writing she has enjoyed excellent health for one year and is exempt from her former attacks due to the accumulations in her tonsils.

The deduction which we would make are:

1. Chronic lacunar tonsillitis is a disease which should be studied and treated individually, and not under the general term of hypertrophy of the tonsils.
2. It is capable of acting as a center of infection in the production of constitutional sepsis.
3. A diagnosis should be made with the utmost precision.
4. The sinuses should be treated exactly as a sinus in any other locality—viz., by excision.

SURGERY AND COUNTRY PRACTICE.

Mr. President and Fellows of the Alumni Association.—I am to speak to you of surgery and country practice. Not the surgery of the specialist done in the country; but surgery of the general practitioner who is compelled to do his work without the instruments or appliances possessed by the city surgeon, and without the advantages of special training that is always open to the man in the city. The greatest number of cases of surgery treated by the country practitioners are fractures and dislocations. Consequently he becomes much more proficient in the treatment of this class of cases than of others, that he seldom sees. There has been a wonderful evolution in splints for the treatment of fractures since I began practice forty-four years ago. The Old Mercy Hospital then stood down here on Wabash Avenue, and the first fractures I ever saw treated were there, and the old fracture box was the instrument of torture used. For six weeks a man must lie on his back, with what they often described as a coal of fire under the bed before the box could be dispensed with. I was living then in my age of faith. I believed that Freer and Brainard were infallible, and that the fracture box was the only orthodox instrument for the treatment of fractures of the leg.

When I began practice I usually found a saw, hammer, nails and boards wherever I was called to treat a fracture, and I made my own box. A man with but one idea is sure to come to grief, and my time came. About 35 years ago I was called several miles into the country and found a broken leg. It was in an old shanty, with neighbors few and far between. I searched the premises and neither boards, hammer, nails nor saw were to be found. What was I to do? In looking around the walls I discovered some old paper boxes on a shelf. The thought struck me they could be utilized. I asked the lady if she had starch, which you will find in every cabin, and told her to make me a pan of starch just as she would make to starch clothes. I cut two long splints from the paper box wide enough to cover about three-fourths of the circumference of the leg, tapering from the knee down and long enough to reach from the knee and lap over each other on the bottom of the foot. I reinforced these by two narrower strips. I then made bandages from an old sheet and proceeded to dress as follows: After adjusting the fracture I bandaged the limb, immersed my splints in the starch until they were perfectly pliable, then molded them to the limb, lapping the ends under the foot, and put a roller bandage over my splints starching each turn as I put it on. I then placed the limb in proper position and waited for it to dry. When dry I found I had a dressing that was firm, fitting the limb nicely and no undue pressure anywhere, and so light that the man hardly knew that he had anything on his leg. The result was perfect. This dressing may have been used years before I used it, but if so, I was ignorant of the fact. I have long since left off the first bandage and in its stead enveloped the limb in absorbent cotton. Should my dressing get too loose I split it down in front and lap the cut edges and run on a roller bandage. If too tight, split, and let it gape. This was the passing of the fracture box with me. I have used this dressing, almost exclusively, in simple fractures of the leg, from that day to this, and have never been disappointed. Instead of keeping my patient on his back for six weeks, I have him out on crutches in one or two days. In fractures of the femur I had a similar experience. Thirty years ago, shortly after locating in Junction City I was called to treat a fracture of the femur. The man lived in a "dug out" and there was absolutely nothing in reach to make splints such as I had used before. A few years before, I had seen, in the St. Louis City Hospital a case of fracture of the femur treated by extension with a pulley and weight, the limb being supported by a folded blanket. I had no pulley, and they had no blanket, but something had to be done. They had an old fashioned lounge—one of the four post kind with a wooden bottom. I found in the "dug out" an empty spool and some fence wire. I ran the wire through the spool and fastened the ends to the lounge posts and I had a good pulley.

I applied adhesive straps to the sides of the leg and fastened the ends below the foot, tied a cord in the loop and brought it over my pulley and tied smoothing irons enough to the distal end to bring the leg to proper position. I then elevated the foot of the lounge so the man's body would make counter extension. Everything was now complete except a support to the sides of the limb. I had the lady make me two sacks about as large around as the man's leg, one long enough to reach from the perineum to the bottom of the feet and the other from the crest of the ilium to the same point. I went out to a sand bank and filled them with sand, placing one on either side of the limb, molding them to fit all the inequalities of the limb. The man made a good recovery. Sand bags may have been used for the same purpose before I was born, but I had not heard of it. There are many things in surgery that the verdant country practitioner has never heard of.

Another fracture that the country physician often meets with is the Colles fracture. My first cases were treated by the long narrow splints recommended by Prof. Colles himself. Then I tried the pistol splint and various other devices and my results were anything but satisfactory. Sixteen years ago I began the use of Prof. Pilcher's dressing and it has never disappointed me. You all know what it is. One thing to be observed in the use of this dressing is to have the support for the arm back of the carpus and keep the thumb looking up. Fractures of the clavicle are often met with by the country physician and often gives him great annoyance. Various modes of treatment have been recommended for this injury. I have tried nearly all of them. Fifteen years ago I first saw Prof. Moor's shawl bandage used in this amphitheater and it struck me as being so simple and appropriate that I have used it since to the exclusion of all others. You will have no trouble in applying it if you will remember that it is a figure of eight, embracing the elbow of the injured side, and the opposite shoulder.

These are cases which the country practitioner is most often called upon to treat, and he has learned much from observation and experience. Another class of surgical cases that the country physician is often called upon to treat is dislocations, and that of the shoulder joint is most often met with. Years ago we used to lay a man down on his back, put our foot in the axilla, grasp the hand and pull the shoulder in place by main strength and awkwardness. We were led to imagine what part of the capsular ligament is torn, and what is the condition of the untorn portion in dislocations of the shoulder. We found the untorn portion always put upon the stretch, and presenting the greatest obstacle to reduction. Common sense said to place the limb in a position to relax the untorn portion of the ligament and lift the head of the bone in place. I have often reduced a dislocation of the shoulder, in muscular men, with very little force.

The sense rule applies to every other joint. Relax the portion that is hugging the bone in the false position and it will go back with little or no force. We country doctors are often called upon to amputate limbs, and we have learned something in that line. Forty years ago I made my first amputation of the arm—an arm crushed in a cane mill. I made a flap operation including the tissues in the flap, stitched the flaps together and dressed with lint. This was before the days of antiseptics or accepsis. I had never heard of pus germs, but had heard of landable pus. My flaps sloughed and I had pus, landable and otherwise, in profusion. I felt mortified, and went to see Dr. Payne, who had assisted me and was a man of experience. He told me that flaps always sloughed. This made me feel better but I could not quite understand the use of making flaps if they always sloughed. Shortly after that I became acquainted with Dr. J. E. Link of Terre Haute, Ind., and assisted him in a number of amputations. He was using the circular open wound method. That is, he made a circular incision through skin and faecia, dissected it back and cut the tissues square down to the bone, elevated the stump and threw a piece of oiled silk over it, washed away the secretions every day, and when the wound began to granulate he brought the flaps together by adhesive plaster. He had better stumps than I had, and I followed his plan until 1878 when I heard of pus germs and carbolic acid. I am still a friend to carbolic acid in infected wounds. But how different my results now from that of forty years ago.

On the second of January a woman of the town attempted to board a caboose while in motion, and fell under the wheels. Her foot and ankle were crushed. I amputated three inches above the ankle using acepsis alone. On the 18th I removed the dressing for the first time, took out the stitches and the wound was completely healed. Not one drop of pus, and the gauze that covered the stump was as clean as the day I put it on. This woman was drunk when she met with the accident, and had been dissipating for some time, so we cannot attribute the good results to the favorable condition of the system. When I have pus in wounds of my own making, I always feel that I am at fault. I sometimes have pus in traumatism where I do not see the wound for some hours, in spite of all that I can do.

In conclusion I will say that I have long since passed through my age of faith, and am now living in the age of reason. Infalibility and I have parted company. I bring all things to the bar of reason, observation and experience. Let us give up pretending to believe that for which there is no evidence, and repeating unintelligible propositions about things beyond the possibilities of knowledge. I have a profound reverence for the great men of science. I love to sit at their feet and learn wisdom from their lips. I believe that Charles Darwin was the greatest naturalist, Hurbert Spencer the greatest physolopher, Thomas A. Huxley the greatest scientist, Rush Medical College the greatest school, and Nicholas Senn one among the greatest surgeons the world has ever produced.

A LETTER FROM THE FRONT.

COTTABATO, MINDANAO, MAY 31, 1900.

To the Editor of the CORPUSCLE: *Sir:*—I would like, of course, to write to all old friends of the class of '97, but anyone knows who has lived in a tropical country that its effects on ones correspondence are destructive, and that an occasional letter from home is about all that can be reasonably expected. It is only three years since I left the lecture rooms of Old Rush, but it seems an age, so great have been the changes. I had the pleasure of accompanying the Second Regiment of Illinois Volunteer Infantry to Cuba, as Assistant Surgeon, in July 1, 1898, and returned to Chicago in May, 1899, In July of the same year I took the position of Assistant Surgeon in the 31st Infantry, U. S. V., which was to be the first of the ten new volunteer regiments to reach the Philippines, but we were delayed eight weeks or more at Angel Island, California, by a mild and very curious epidemic of small-pox. We finally arrived at Manilla November 28, 1899, and were immediately sent to garrison posts in the island of Mindanao, the most southerly large island in the Archipelago. I am at the post of Cottabato, a town five miles up from the mouth of the Rio Grande de Mindanao, with six companies.

This country is peopled almost entirely by a half-savage race called Moros, a poor sort of Mohammedan; very dirty, lazy, thieving and treacherous. There is a tribe in the mountains south of us called theTirurays, who are a study; they might also be called the missing link so degengerate and worthless are they, living like birds in trees and in inaccessable places on the mountain sides. They flee on the approach of a white man, being very timid people, not fighting even among themselves. They are at present dying rapidly of starvation. We try to feed those that come into town. They do not care to work; but prefer to go about the streets veritable living skeletons, picking up any dirty scrap of mango or banana skin. Many of them really prefer to starve rather than work. If one gives them money they go at once and gamble or buy candy. They intermarry indiscriminately and have no social laws. The women wear, as the most noticeable article of dress, brass rings about ankles and wrists; those on the ankles often weighing them down so they can hardly walk. Those on the arms reach from wrists to elbows. On their ears are all the way from one to twenty ear-rings, the two ears being connected by beads under the chin.

Besides these Tirurays, the natives state that a week's travel in the mountains will bring us to a tribe of people called the Bangal Bangals, who have tails, one eye in the middle of the forehead, and their mouth in their left armpit. I have not been fortunate enough to see any of these yet, but will send the college one as a curiosity when I find them. Some of the little black Negritas are said on good authority to live in the interior; but what may be in the interior and what is not, is unknown, for it has probably been less explored than the heart of Africa. If I am here for another dry season I intend to take a trip across the island.

The Moros are an intelligent race, but treacherous. The men wear a turban and tight trousers and a tight-sleeved blouse; a sash is thrown over one shoulder and across the body, giving them a very picturesque appearance. Their religion is nominally Mohammedan. The priests are Arab Hadjis, or Panditas, who have made the pilgrimage to Mecca. They are also their medical advisors, using hative herbs, and also magical pieces of paper upon which are written passages from the Koran and then wrapped up in yards and yards of cloth. These not only cure but are a charm or "agimot" against all injuries or sicknesses. They cost according to what they are supposed to protect from; for instance, one to protect from kris or campilan cuts costs about five or ten dollars, Mexican; one to protect from a Remington rifle costs about twenty-five dollars, and in order to get a charm powerful enough to protect against a Krag-Jorgensen or Mauser rifle one must pay from a hundred to two hundred dollars, and only the wealthy can afford them.

There are growing here in moderate amount the Carica Papaya, Theobroma, Aloes, vera, Zingiber, officinales and ignatia; all of these are used by the Moro priests.

One of our soldiers was drowned last January and I worked over him for two hours without success and then the

Moros begged to be allowed a chance which was given. One of them put the body over his shoulder with the head hanging down, then trotted about with him with the effect of ejecting a large amount of stomach contents. This they continued about five minutes. Then they threw his legs across a pole with the head still hanging down and agitated the body by grasping the arms and swaying it and jerking it back and forth. These processes were alternated for half an hour when they also gave it up.

They do not esteem our medicine very highly as was illustrated when I went up to see the son of Datto Piang, the most powerful Moro chief about here. It was reported that the boy was very sick, and he being the favorite son of this important datto, the Commanding Officer sent me up the river fifty miles to the datto's rancheria where the boy was. I was received very cordially indeed by the old man who treated me the very best he could, and was soon taken into the sick room. The patient was on a bed made of numbers of native rugs in the center of the room and surrounded by a dozen or more slave women, some with fans, others with cocoanut water, and one with a cuspidor for the prince to use. The datto said the boy had been in bed for about two tiangies (which is their way of reckoning time, a tiangi being a market day, these coming twice a week). He also said that this class of sickness usually kept the patient in bed six or seven tiangies, or three or four weeks. The boy was found to be in about the second degree of typhoid fever. I gave the medicine with directions to the datto which he said would be immediately carried out to the letter. The days passed by and I could not detect the slightest effect from the treatment, even when I gave cathartics there was no movement of the bowels, no relief of headache or lowering of temperature when Phenacetine or alcohol baths were ordered, and nearly a week passed before I discovered that not a pill or any other medicine I had prescribed had been used, although the datto always said "Oh, yes it was given just as you directed at such and such an hour." So I told him that I had done all I could, and took my leave with some valuable presents and the profuse thanks of the datto. I learned later that an alligator had been caught in the house on the same day that I left, and about it is an interesting story The mother of the boy on hearing that the alligator had been caught at once said that when the boy was born there went forth from her body at the same time the misty form of an alligator, the boy's "spirit brother," and that now that alligator had come back to cure the boy's illness. So the Panditis were called and held a great pow-wow and read long passages from the Koran, then took the back skin of the alligator and other choice parts of its anatomy and made medicine which the boy of course took. Strange to say, I am told that from that minute he made a rapid recovery, to the great cred-of the Panditas.

The resources of this country are unlimited. Gold, silver, copper, iron and coal have been found in paying quantities. Woods of all kinds exist in abundance. Mahogany and ebony being the most valuable. Most anything will grow all year long, and there is now growing and being exported corn, rice, hemp and gutta-percha, cocoanuts and cocoanut oil. An American with even small capital might grow wealthy soon here. The natives know nothing of agriculture, planting corn in the shade of large trees and leaving great fields of the finest corn land untouched.

There is no insurrection in Mindanao, but the Moro question is a great one, and if an outbreak ever starts among this people it will be a tougher proposition than Aguinaldo has ever been.

American soldiers seem to stand the climate remarkably well; there having been until recently a percentage off duty on account of sickness of less than two and a half per cent. One would expect to find malaria rampant, but I have not seen a single case of typical malaria in six months. The ground we are on is all filled in and we are surrounded for miles by low, marshy ground, alternately flooded and drained by the rains and tides. All the water around us is salty at high tide and fresh at low tide. In the evening the air is alive with vicious mosquitoes, and one must have a punkah going all the time over his head or a boy to keep fanning, if you expect to sit in peace.

The drinking water is derived entirely from the river in which the entire filth of the town is deposited; about two thousand inhabitants, and why tpphoid fever is not prevalent I cannot say. All water for the troops of course, is boiled and put through a Pasteur-Chamberlain filter, so we have had but three cases of typhoid fever since we have been here, about six months. Numerous and very interesting skin diseases are endemic among the natives. The soldiers have been attacked by nearly all of the contagious skin diseases, mostly pemphigus contagiosa and the commoner epiphytic affections. I have seen half a dozen cases of leprosy and one case of Madura foot.

With best wishes for the college, I remain

Yours truly,
Ralph S. Porter, '97.
1st Lt. and Asst. Surgeon 31st Inf. U. S. V.

The Corpuscle

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Rush has taken another great step towards increasing her clinical advantages. Arrangements have been made with the staff of the United Hebrew Charities Dispensary by which students may attend the minor clinics at that institution. The benefits derived from this acquisition are great; but of greater importance still is the procedent that this step establishes. We hope that the authorities of the college do not intend to let the good work rest here but will extend student clinical advantages to other similar dispensaries in the city. This increases by many fold the opportunities of practical instruction.

COLLEGE NEWS.

Dean Dodson has been spending a few days in Wisconsin.

The classes at the United Hebrew Dispensary report very interesting clinics.

Chester Echals of the senior class and Miss Florence Bessie Skillin were married at the home of the bride's parents in Oak Park, June 28, 1900.

Prof. Senn, ex-surgeon-in-chief of the Volunteer Army, offers his services to the army in China.

Baum, '01, has been ill with typhoid fever in the Presbyterian Hospital during the last six weeks.

The college had a holiday on G. A. R. day during the recent reunion.

Prof. Bertram Sippy commenced medicine lectures to the senior class August 1st, taking the hour previously occupied by Prof. Cotton's pediatrics lectures.

Wood street is being got in shape for a new brick pavement.

The upper amphitheatre has been newly decorated and painted.

Two new lockers and a sink have been added to the pathological laboratory.

Born to Prof. and Mrs. Bertram Sippy, a son. Dr. Sippy Jr. arrived August 6.

Dr. Peterson has been conducting some interesting gynecology clinics during the absence of Prof. Webster.

Ralph Hamil, 1902, will coach the Center College football eleven during the coming season.

Stuart Sheldon, 1902, returned to Chicago the middle of the quarter to commence work under Dr. Le Count.

R. A. Bachman of last year's class is located at Dayton, Wash., and reports a good practice.

H. E. Dearhalt, 1900, has opened a fine suite of offices in the Camp building, corner of Wisconsin and E. Water streets, Milwaukee.

Charles E. Ide of last year's class has commenced a service at the Passavant Memorial Hospital.

E. E. Tolman, 1900, is now located in Milwaukee.

THE ALUMNI BANQUET.

The great banquet room at the Auditorium hotel was handsomely decorated on the night of June 29 when the invited guests, the faculty of the college, and the graduating class met for the annual alumni banquet. Half a hundred tables were arranged about the apartment, with those of the speakers at one side. Upon each table were beautiful bouquets of cut flowers and shining silver candelabra.

When the banqueters were seated waiting for the beginning of the feast the scene was one to be long remembered. About the tables were gathered the faculty of the greatest medical institution in the west and the greatest class of graduates which that institution has ever sent from its doors. There was seen the pride of the medical fraternity in years past and to come, met for a last good-bye. The scene was an even greater one than that which had met the eyes of the thousands who had gathered to witness the ceremonies investing the class of 1900 with the dignity of their professional degrees.

A short reception in the Studebaker parlors adjoining the banquet room preceded the chief event of the evening. When the time came for the beginning of the banquet the classes were ushered separately into the banquet room. Prof. Bevan called the numbers of the classes, beginning with the first which graduated. Only a few of the classes whose time of graduation antedated the present decade were present, but the graduates of the last half-score of years were strongly represented. Next to the graduating class in point of numbers were the members of the class of '99.

The banquet furnished for the discussion of the assembled company was arranged with the care and elegance characteristic of the well-known Rush hospitality. The viands were the daintiest and the service was the most excellent to be had, in a city noted for the capability of its stewards. The attention of the banqueters was occupied by the feast for nearly two hours, and the intervals between the courses were filled with jests and merry laughter. Professors and their erstwhile students disregarded the barriers of conventionality which had held them for four years, and good-fellowship reigned supreme. After the debris of the feast had been cleared away the program of toasts was begun.

The speechifying was ushered in by Prof. Henry B. Favill, who in a speech full of neatly turned and earnest phrases welcomed the class of 1900 into the profession of medicine. He said in part: "We must now conceive that in a sense this class has become the parent or sponsor of old Rush, while the faculty remain the decidedly humbler members of the college. We cannot but deplore the severance of the sentimental relations that have necessarily existed between this class and the remainder of the student body. Now that the members of the class of 1900 are students no longer, but have left the halls where they have had so much in common with their fellows, they will have a tendency, as alumni usually do have, to look upon the undergraduates of the school with something of the feeling which a stern parent entertains for an over-educated child, considering that it would probably be better pleased if allowed to shift for itself. I exhort this class not to allow such an idea to obtain in their thoughts of Rush, for the college needs their support."

Prof. Favill called attention to the relations between Rush Medical college and the University of Chicago. He called upon his hearers to exercise their patience until the purpose of the affiliation shall be fully accomplished. He urged that in future the alumni exert themselves to be present at the annual reunions. The next speaker was Prof. Small, of the University of Chicago, to whom Prof. Favill referred as his colleague in the university's work.

Prof. Small paid a tribute to the medical profession for its growing disregard of the old system of specific treatment, and its steady advance in methods having as their basis the rational study of the individual case. He declared his belief that no class in the community can exert a wiser influence in society than the physician. "The minister," said he, "Is an idealist. The teacher works for the next generation. The judge is away from contact with the conditions which he seeks to adjust. The lawyer is an advocate of his client's case, while the doctor's work places him in a position to administer social therapeutics with incomparable benefit."

Some of the soundest wisdom enunciated during an evening of wise counsels was that of Prof. J. C. Webster, who spoke next. He delighted his hearers by an eloquent eulogy of Prof. Keen, whom he characterized as an idealist of the most practical sort. Prof. Webster said:

"I came to Rush Medical college because I believe with the poet that a man's aims must exceed what he is able to grasp. I have been more than justified by the result. Osler refused to go to Edinburgh because he could approach nearer his ideal at Johns Hopkins. I came here because I could find mine here. I have found a place where a medical corporation has done an unprecedented thing—has given up the control of money and rights, and has given to others the college management, all in order to put itself in touch with a great university. This corporation has done a wonderful thing; and the wisdom of its course is shown in the influence and growth of the school. The University of Chicago typifies the spirit of progress in its highest development. The medical school at the University of Edinburgh was for many years a money-making institution. It bent its energies to attracting students. It grew in wealth, and the professors received large salaries. The result was deterioration in the quality of the work done, because men were given positions there for their ability to teach. Thus higher research work suffered. The attitude which Rush has assumed is in direct opposition to this spirit of commercialism. Johns Hopkins is a great school, but it is not so great a school as Rush is destined to be." In concluding his remarks Prof. Webster made an earnest plea for endowments to further Rush's influence, and called upon each alumnus to use his efforts to secure endowments from those in a position to make them.

Prof. Coulter of Purdue University complimented the medical profession for its high ideals, for the devotion of its members to the best interests of humanity, and for its resolute progress along the paths marked out by science. He urged that aspirants for medical honors be encouraged to avail themselves of the advantages offered by the pre-medical course now conducted at many colleges.

The remarks of Prof. Keen, though brief, were replete with eloquence, He reviewed the history of surgery during the last century, drawing parallels that showed graphically the progress of the science in the comparatively brief period which has intervened since the time of barbarous practice and slight results. He expressed regret that he should be unable to witness what the first decade or two of the new century is certain to bring forth.

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OPERATION FOR UNDESCENDED TESTICLE AND CONGENITAL INGUINAL HERNIA.*

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*Presented to the Section on Surgery and Anatomy, at the Fiftieth Annual Meeting of the American Medical Association, held at Columbus, Ohio, June 6-9, 1899.

During the last year I have developed an operative procedure, first in connection with congenital inguinal hernia, and later in connection with undescended testicle, which has been very satisfactory in the few cases in which I have employed it, and which I believe is of sufficient value to warrant my reporting and urging its general adoption. As malformations in connection with the descent of the testicle, we find: 1, the rather common condition of congenital inguinal hernia, due to failure of closure of the vaginal process of peritoneum, and 2, the malpositions of the testicle, which might be divided roughly into three groups—*a*, within the abdominal cavity; *b*, in or about the inguinal canal, and *c*, in the perineum.

Cryptorchidism is not very uncommon, although the condition is usually concealed. Statistics of the Austrian army show one case in each five hundred men drafted for military service. Little attention has been paid to the operative treatment of the deformity in America. Formerly, when a cryptorchid presented himself to me for advice, I dismissed him with the statement that nothing could be done to correct the malposition, and I found from reading our standard surgical works and from conversation with my colleagues that this was the position almost universally taken. This deformity brings with it both mental and physical distress and dangers which warrant surgical interference for its relief—mental disorders, such as hypochondriasis and hysteria; physical dangers, such as hernia, inflammations from trauma, twisting of the cord and gangrene, and a great susceptibility to malignant degeneration.

For some years the teaching of most surgical authorities has been never to interfere with this condition unless urgent symptoms were present, and then to castrate. In the pre-Bassini days, this teaching was undoubtedly correct. To-day, however, to secure normal wound healing and the knowledge of the region involved, obtained from our experience in hernia work, has made this position no longer tenable, and I shall endeavor to show that the rule now should be to operate and transplant to its normal position in the scrotum every undescended testicle which can be palpated, whether it causes symptoms or not.

The malposition of the testicle is often complicated with hernia, and hernia of a very dangerous and distressing type. When the testicle is retained up in the abomen and does not reach the internal abdominal ring, a hernia is not very apt to co-exist, but in one-half of the cases, where the testicle is in or about the inguinal canal, a hernia is present. It is difficult to retain such a hernia with a truss because the pressure on the testicle is unendurable and such pressure is apt to produce traumatic inflammation of the organ.

The malposition of the testicle appears from statistics to make it prone to malignant degeneration in a far greater percentage of cases than in the normal testicle. Zymanowski, who investigated this subject most thoroughly, comes to the conclusion that all retained testicles should be removed because of this danger alone. He was himself a monorchid and died with carcinoma of the retained testicle.

Statistics seem to show that carcinoma of a retained testicle is peculiarly malignant, as no cases of cure have followed removal, all cases dying within a short time of recurrence. I have had but one case of malignant disease of a retained testicle, a case of sarcoma. Castration was followed rapidly by a great sarcomatous mass in the abdominal cavity, metastases in the brain, and death.

A retained testicle in or about the inguinal canal is peculiarly liable to injury, both external injury from its exposed position and also injury from bodily movements, exercise of any kind in which the abdominal muscles are strongly contracted, sneezing and coughing. I have had one case in which the patient was compelled to remain in bed whenever he had a slight cold, because the pain of coughing and sneezing was excruciating. These injuries are followed, when severe, by the sickening sensation peculiar to a trauma of the testicle, nausea and sometimes syncope. Swelling and traumatic inflammation of the testicle may follow, and, if infection from without or through the circulation, occurs, suppuration and sloughing may result. As rarer complications of undescended testicle, hydrocele and twisting of the cord, followed by necrosis, might be mentioned.

One of the accompaniments of undescended testicle which is seriously distressing to the individual in whom both testicles have failed to descend, is the fact that, as a rule, such testicles are sterile. Why this should be so is difficult to state, because in many animals the intra-abdominal position is normal; the fact remains, however, that most undescended testicles fail to develop and produce living spermatoza.

I have very briefly stated the dangers and discomforts of the condition of undescended testicle simply to claim, as I do now, your consent to the statements that they are as great, if not greater, than those of ordinary inguinal hernia. We do not hesitate to offer a patient the benefits of an operation for hernia. Why should we refuse the cryptorchid the benefits of a surgical procedure which, if properly done, is as safe and as sure as a Bassini hernia operation, and which is of more value to the individual both from a physical and mental standpoint?

In pre-antiseptic days the treatment of undescended testicle was mechanical. An attempt to bring the testicle into position by pulling and pressing the organ into the scrotum, or the continuous pressure of a truss above the testicle when this could be employed; or when these means failed, which they almost always did, either dismissing further effort, or castration. A few attempts were made to transplant the testicle into the scrotum by a cutting operation, but these failed because of ignorance of the surgical anatomy necessary to unravel the malformation and malposition, or becouse of infection. Such treatment did not find adherents, because of the bad results, and was never admitted to the position of a standard procedure.

Soon after the general introduction of antiseptic surgery into German clinics, Max Schuller, then in Greifswald, published in the *Centralblatt*, and also in the *Annals of Anatomy Surgery*, the description of an operation which he had made for undescended testicle, in which he laid the foundation of a surgical procedure, correct anatomically, in that he recognized the chief factor which prevented the drawing of the testicle down into the scrotum and the factor which drew the testicle back into the old position after operation. This factor was the peritoneal prolongation extending from the general peritoneum to the tunica vaginalis; that after division of this vaginal process it was possible to bring the testicle down into the scrotum without tension. He stitched the testicle to the bottom of the scrotum. His patient made a good recovery and, as he reports, the small undeveloped testicle rapidly increased in size.

Following Schuller, Nikoladoni, Kocher, Czerny and Ziebert in Germany, and Tuffier, Richelot, and a number of other French surgeons have developed the operative treatment of undescended testicle. In Great Britain and America little work of this kind has found its way into the literature, so little in fact that my attention had never been called to the work already done along this line until after I had developed the technic which I am about to report.

In the first place, I desire to refer briefly to the best method of handling the vaginal process of peritoneum in operations for congenital inguinal hernia. I have until recently been in the habit of obliterating the vaginal process in these cases by a purse-string suture at the internal ring, and by whipping up the peritoneum around the cord with a continuous catgut suture, leaving enough to form a tunica vaginalis. I did this because of the great difficulty I had experienced in separating the vaginal process from the cord. I found in one case in which I had done this, that the testicle was dragged high up, almost out of the scrotum, by the subsequent contraction of the vaginal process.

In a careful dissection of the case of inguinal hernia, I found that although it is a very difficult to separate the vaginal process from the cord proper, when I opened the inguinal canal widely, so as to expose freely the internal ring, I could very easily separate the peritoneum from the cord just where the cord separates into its constituents elements, i. e., where the vas turns inward and downward and the spermatic vessels pass upward. Here I could readily separate and cut off the vaginal process and close the abdominal cavity as in treating the sac of an acquired hernia. Further, I found that by following the vas and spermatic vessels inside of the abdominal cavity with my finger, and freeing them from the peritoneum covering them, I could pull them a surprisingly long distance out of the abdominal cavity. Since that time I have had the opportunity of operating on four cases of congenital inguinal hernia which I have handled in this way, by an incision three inches in length over the inguinal canal, splitting up the entire length of the canal, freely exposing the internal ring, opening the vaginal process very high up where the vas and spermatic vessels separate, ligating the vaginal process with catgut at the internal ring and dividing half an inch below the ligature, then, without stripping the vaginal process from the entire length of the cord and without removing any of it, throwing a catgut ligature around it and ligating it so as to close it, forming a large tunica vaginalis.

In operating on undescended testicle, whenever it is palpable about the canal, I have pursued the following technic: Incision three inches long over the canal; the incision should never involve the scrotum. It should never extend farther inward or downward than the external ring. If the testicle is in the canal, split the canal open the entire length by division of the external oblique, draw out the testicle by dividing all the covering over it down to the peritoneum, run the finger along the vas and carefully separate the peritoneum from the vas for two or three inches within the abdomen, run the finger along the spermatic vessels, and in the same way carefully free them from peritoneum. Now separate the vaginal process from the cord high up, ligate the peritoneum of the internal ring, and divide the process half an inch below the ligature, remove all the coverings from the cord, so that the testicle hangs suspended by the vas and the spermatic vessels. It is surprising to find how movable the testicle now becomes. It can be readily laid on the thigh several inches below Poupart's ligament. The index finger is now carried into close contact with the external oblique over the crest of the pubis into the scrotum, and with the blunt dissection of the finger a large pocket is made on that side of the scrotum for the reception of the testicle, great care being taken to make the opening of the pocket only as large as necessary to admit the testicle. The very freely movable testicle is now slipped into the scrotal pocket where it remains without tendency to retract. The testicle is now sutured to the scrotum, such suturing being of no value in preventing retraction, simply adding the risk of complications. If the testicle has been properly freed, it becomes at once evident that such suturing is superfluous, and if the testicle has not been freed sufficiently and cannot be retained in the scrotum without suture, then one may be sure that it will retract in spite of such suturing. The inguinal canal is now restored as in a Bassini operation for hernia, or what is better a Bassini operation without transplantation of the cord, which Senn advocates as preferable to a Bassini and which Ferguson, of Chicago, described as the typical hernia operation. After the closure of the canal and external ring there still remains one of the most important steps of the operation, i. e., the sewing of the deep layer of the superficial fascia to the aponeurosis of the external oblique by means of fine buried catgut. This is done throughout the operative field, over the inguinal canal, and well down over the pubic crest to the neck of the scrotum. The object of this step is to obliterate the areolar space between the superficial and deep fascia in front of the external ring. It is in this space that the testicle retracts in case of recurrence of the malposition.

I have in this manner operated on four undescended testicles, one double and two single cases. In all of these cases the freeing of the testicle was easily accomplished after the manner above described. In all cases the testicle could be laid on the anterior surface of the thigh three or four inches below the external ring. All of these cases had open vaginal processes practically, therefore congenital inguinal hernia. In but two, however, was the existence of hernia made manifest by symptoms. In the two single cases there was an abundance of scrotal tissue and no difficulty was experienced in making the scrotal pocket. In the double case, however, there was absolutely no scrotum, in the sense of a pouch, before the operation. The skin was perfectly flat from the root of the penis to the perineum, but was thrown into transverse ridges by the muscle tissue of the dartos. After freeing the first testicle it was found that this tissue could be freely stretched and a good-sized pocket was made with the blunt dissection of the finger. After the double operation had been completed—in this case the testicles were almost normal in size—the scrotum looked like some of the cases where a very extensive amputation of the scrotum is made for varicocele. The operative wound in all cases healed by first intention, and in none has there been any tendency to retract. The three patients operated on were about the same age, one 20 years old, two of 21. I believe that the age of selection for this operation would be about 15, or better, let us say, immediately after the age of puberty. It is possible, however, that a more extended experience will select the period before puberty, from 8 to 12. Not one of these was more difficult to perform than a simple Bassini hernia operation. The results have been satisfactory. I might add, I have never had more grateful patients. The condition for which the operation was performed was certainly of more moment to the individual than the existence of a simple inguinal hernia.

As results of the operations, the patients were freed from hernia and dangers of hernia. The testicle was placed in its normal position where it is probable it will develop into a normal testicle. The testicle was removed from an exposed position where it was subject to trauma and inflammation, and it is probable that after such an operation the testicle will be less likely to become the site of malignant degeneration than if allowed to remain in a position where it was constantly subjected to trauma. This operation is to be preferred to castration, as it saves the testicle for the individual. Aside from the mental value of such saving, it is not improbable that the addition to its function of producing spermatozoa, the testicle, like all other granular organs, produces certain compounds which are of value in the normal life processes.

Because of the benefits produced by this operation; because of its safety; because of the dangers incident to the deformity, I would urge the general adoption of the operative treatment for the relief of these patients. Certainly, in the light of our present knowledge and skill we can assure these patients that an operation holds out to them a reasonable prospect of cure, and that the dangers of a properly conducted operation are far less than those of the continuance of the deformity.

THE PHYSICIAN AS A BUSINESS MAN.

By F. C. Honnold, M. D., Riverside, Ill.

If an apology from me is necessary for presenting a paper, under this title, at a scientific meeting, I shall refer you to the secretary of the association, who is responsible for its selection.

Several years association with Dr. Rhodes in dealing with alumni of this college and a somewhat extensive observation of the profession in general has proven to me that the bad repute into which physicians as a class have fallen, for being poor business men, is entirely earned and thoroughly deserved.

There are a certain number of men who are an exception in this particular, but they are not numerous and their rarity has made them such an object of interest to me that I have taken great pleasure during the last half dozen years in studying some of their methods, adopting such as appealed to me and testing their merits, and as a result of all this, I have come today to discuss with you the possibilities arising from a study of commercial methods as applied to our work. It is not my purpose to assail the profession for their shortcomings in this line, but, if possible, to show how we may more promptly and satisfactorily despatch our work and secure better results both professionally and financially.

The distinguishing characteristics of the successful business man that are most commonly found wanting in physicians, are these: Definite business policy, attention to detail or minutiae, and method.

As to the first of these it is well to remember that business policy is nothing more nor less than a well considered notion of what we wish to attain, around which we expect to group certain fixed principles which shall govern our effort and constitute rules for our general guidance, and such a policy is just as necessary with the physician as with the business man.

A few of the many things embraced in a policy of this kind are these: Be active and progressive, keep up to date take good periodicals and read them, make it a point to add fresh text and reference works to your library every year, and if possible take post-graduate clinical work. Save and file the technical and clinical data of especially interesting cases that occur throughout the year, and write at least one paper on some subject every year, whether you read it or not. You will learn more of the particular subject treated in this manner than in any other way I know of. Improvement of professional ability is always a matter of good business policy.

As a further matter of importance, both as a satisfaction to yourself and as an index to the community of your success —estrblish and maintain gilt edge credit,—accomplish this by the prompt settlement of all bills. Economize or if necessary buy less, but keep your credit good. It will also be well to see to it that every detail of your business is carefully attended to, and that everything attempted is carried to thorough completeness. It is surprising how frequently judgment averse or favorable to a physician is based upon some little detail of his work to which he perhaps attaches little or no importance. First-class equipment and paraphernalia, kept always in first-class shape; good taste, tidiness and cleanliness of your own person, you office, your house, yard and barn; neat blanks, labels and stationery, and of the very best quality that you can afford, for there is nothing that "succeeds like success," and like to follow after a successful man. It is not only legitimate and good policy, but your duty, to appear always at your best.

An arrangement must always be had that will establish a perfect understanding between us and our patients as to charges, mode and manner of keeping accounts and rendering bills therefor, and all such details as bring us into direct business relationship with the people. There is room here for much argument as to what is the best policy, and it is impossible to lay down any hard and fast rules by which one may be guided in determining the best course to pursue since different conditions and surroundings finally determine such matters, there is only one thing that is certain with reference to this especial feature, and that is that every physician must have a few rules and he must make it his business to thor oughly acquaint his patients therewith. A man who practices medicine conscientiously is entitled to a living, and a good living, both for himself and his family, with a sufficient amount left for the latter in the case of his death to provide for their necessity at least, and unless a very definite policy prevails there is small hope for the accomplishment of either of these very desirable ends in these days.

There must be no wide variation in the fees charged for similar service, and none without adequate explanation, for a doctor's business seems to be the immediate affair of the public and there is usually a ready accounting if there is any evidence of favoritism shown.

Personally I have adopted the rule of allowing a discount for cash within the current month in which a bill matures and in so doing can favor those of my patients that pay promptly. The matter is nearly always mentioned to me by some slow-paying friend and offers a splendid opportunity to tell them just how it comes and that I shall be glad to favor them in like manner and many times has the happy effect of bringing them into the prompter paying class.

And last but not least in this matter of policy, be punctual— make it a part of your religion. Keep your work always up, make your calls immediately upon their receipt, if possible, try to be forehanded, apprehending a demand and preparing for it, all of which is only possible by following a regular method or system of doing things, and it is along the line of possibilities in this particular that we will next speak.

Most busy and successful physicians consider themselves excusable for their failure to accomplish many of these things which are considered commendable because as it is, they are working decidedly long hours such hours as would cause open rebellion in the ranks of union labor, even at the extra rate of pay allowed for overtime. In many of these cases, however, a lack of business system is accountable for the long hours, for incomplete work and for unsatisfactory results and returns.

At first thought it will occur to most of you as entire impossibility to systematize a physician's work and provide for the many unexpected occurrences that mark his daily life, but barring the occasional and very exceptional day when two confinements and a dozen calls knock all plans to the winds, the situation is capable of decided control, and with a system once in operation that is adapted to your particular surroundings, your working ability is much increased—in most cases doubled. Proper attention to detail is scarcely possible without system.

As the first step toward establishing method in your work, be as regular in your habits as possible; classify your work and appoint certain hours for certain things- Have allotted hours in which to do your outside work and make your daily rounds, definite office hours and an allowance of time each day for reading and business detail. The exigencies of your work will, I understand, frequently interfere with your program as mapped out, but have the rule that you are always working and unless you have tried it you will be surprised with what success you will follow it.

Bear in mind that your time is one of your principal assets, and in making your rounds, economize on it. If your business warrants, remember that a boy at fifty cents a day to hold your horse and do odd chores will save you time that you can get two or three dollars for to say nothing of the saving on linen and the wear and tear of your christian disposition. Visit with your patients enough to keep in touch with them but no longer. A man can do wonders with ten minutes if he uses it right.

I am a firm believer in office hours, even in strictly country districts, and I believe in encouraging every patient that can, to come to the office. It saves time for you, finds you surrounded with all yonr instruments of precision, enables you to work more rapidly and with greater satisfaction both to yourself and patient, saves him money and you worry in many instances, and is altogether desirable.

Having established office hours, keep them steadfastly, allowing only decided emergency and nothing else to carry you away. An old doctor friend of mine once told me that if I would keep my office for two years that after that it would keep me, and I have found it true.

In handling patients in your office have a regular system of doing your work. Make such a thorough examination as precludes the possibility of having overlooked any essential feature of the case, and having done so, or as you make the examination, write it down, then write your prescriptions or dispense your medicine and keep a record of that also and when the patient leaves you file that completed record, drop the case from your mind and take the next one, for having a complete record you have no need to burden your mind remembering things that paper and ink were devised to keep for you—then if in a week, month or a year you are asked about a call or for some more of those pink pills or that tonic you ordered before, you can look the matter up and see just what it was and if they really need it. And incidentally you have a statistical record that as you grow famous will prompt you to hesitate in making statements about cures and the value of certain therapeutic measures that don't square with the various notations on that original record of yours.

I have been greatly pleased with the results attained in keeping records of my office cases in this manner, and have found the most convenient means of doing so in the use of the card files so common to the desk of the business man of today.

While considering this matter of records I would also urge the free use of every means possible to relieve your mind of the burden of remembering things.

Establish the habit of keeping a bedside record of every case of a probable two or three day's duration or over. Do so whether you have a nurse or not. Set down the pulse, temperature and other essential findings, the day of the month, day of the illness and hour of the day that the observation was made; write the directions for the time intervening until your next visit and ask to have them checked as they are fulfilled, and in addition to keeping in positive and perfect touch with your case, and avoiding the possibility of forgetting something in the stress of long hours and weariness, you will have the satisfaction of noting the pleasure of the friends of the sick one that you keep such careful watch of them. And then again you have notes if the case prove of any exceptional interest.

As another feature of your professional method, it is well select a certain definite amount of time each day for reading. In this glad hour look after your current literature, read over again, if you are a young man, the differential diagnosis of that doubtful case that you have passed upon today, add another touch or two to the paper that you have in hand, look over the literature of the latest therapeutic agent exploited. Attend to any and all such things as will enable you to keep in touch with the progress of the day in your work. Move a little faster all day to get that hour in, for it is the hour that keeps you from falling behind the times and becoming the conventional "old fogey."

It is also imperative to have a fixed policy and method for attending to purely business matters. If you know you are careless or feel the prodromal symptoms of business carelessness and indifference stealing upon you, take strenuous measures to correct it promptly.

Have one room in your house reserved for your library and office. Provide yourself with a desk in which to keep and retain all of the varied papers of minor value that are sure to accumulate, provide yourself with a typewriter also, particularly if you are a young man—it will save its cost to you in the first half dozen years that you own it, besides this is an age of progress and the typewriter is one of the things that makes it so. Have certain days on which to answer accumulated correspondence, and file the daily grist of letters whether they be many or few to await that day. Have certain days in every month on which to pay your bllls and file them likewise for that day. Keep some kind of a little tickler on your desk in which to file memoranda of engagements, future obstetrical cases, wants in instruments and supplies as they occur to you or are discovered short, the full name and address of nurses, neighboring and consulting physicians, and all other such unimportant mattersas will burden your mind to remember.

Make out and mail your bills regularly, whether it be your custom to send them monthly, quarterly or yearly, and if no response is received therefrom, go out or send your your collector promptly and see what is wrong. Remember that an unsettled bill, whether it is unpaid from carelessness or because all or some part of it is questioned is the best enemy-maker on earth. See that it is settled, get it off your mind and the patient's, so you can begin over again. Find out whether they like you or simply find you convenient. Generally after the first sixty days, doctor's bills depreciate at the rate of about ten per cent. a month, and if no arrangements is made for settlement within the first twelve months the account can very properly be considered closed.

In listening to all this mention of detail and the method of handling it, it may seem to many of you that in completing and filing records of all of these things and living so rigorously to a fixed rule we are only adding to the burden of the day, and it may so seem at the outset to such of you as have not, but think of trying it; nevertheless I can assure you that with the formation of a habit of doing your work in this manner a brighter day will dawn, for you will not only increase your working ability, gain more leisure, get on faster financially, but over and above all this will admit that there is a certain amount of satisfaction in feeling that there is system and completeness to what you do. It is not how much but how well we have done our work that counts.

It has not been my idea in reading this little paper to offer advice, but simply to urge upon you a trial of economizing energy by doing your work methodically.

To such of you as desire literature along the line of the subject matter herein, I can recommend Cathell's "Book on the Physician Himself;" "The Physician's Business and Financial Adviser" by Mabee, and a late article by G. Frank Lydston, appearing in two of the late numbers of the journal of the *American Medical Association.*

THE IMPORTANCE OF LITTLE THINGS CONTRIBUTING TO PHYSICAL WELL BEING.

By B. M. Griffith, Springfield, Ill.

What I have to say is not offered as new or original but as the result of my observation and experience, which have sufficiently emphasized to me the necessity of a good healthy organization in order that we may enjoy to the fullest extent what this life has to offer.

The truths contained in the few suggestions here offered as an aid toward securing and maintaining a good physical well being, were taught us at school, but owing to their apparent simplicity the full significance of such instruction was not realized or appreciated at that time. Some empirical practices are well founded, but their true values are more thoroughly appreciated when the scientific rationale is comprehended.

If possibly I may present some phase of this subject in such a way as to impress upon you its importance, my purpose will have been attained.

We universally accept the truth, that upon the perfection of the component parts depends the symmetry of the whole; this is true of the physical organization as well as of mechanics. About eight-tenths of the sickness with which mankind is afflicted, is preventable, the greater portion of this preventable sickness is due to carelessness or neglect on our part in the observance of the every day ordinary affairs of life. Take as an illustration one of the most common or universal occurences—the so called catching of a cold. This the laity usually consider an insignificant affair. How frequently one is so afflicted without knowing when, where or how it took place. This can be in most instances prevented. One of the simplest as well as most efficacious methods of rendering the body immune to this unpleasant occurrence is the daily employment of the cold sponge bath, followed by a vigorous rub, taken early in the morning. In many persons with a tendency to acute catarrhal afflictions I have seen the most beneficial results follow the employment of this simple procedure. To derive the full benefit this must be practiced regularly and conscientiously. By this means we not only prevent susceptibility to cold, but by the stimulating effect on the whole system contributed in no small degree to the general physical well being of the individual.

Within recent years the laity have more than ever recognized the necessity of avoiding constipation if they wish to enjoy the benefits of and preserve their physical well being. The medical profession has done more than all others toward securing the educational advancement.

To a certain extent the public advertiser has assisted, for by constanly keeping his product before the newspaper reader he has thereby impressed the public mind with the importance of this function. For a realization of the fact that there is a necessity for obviating or correcting this prevailing tendency one need merely observe how numerous are the preparations advertised as a panacea for this condition. The patent medicine enjoying the largest sale today is a laxative medicine sold simply as such. Medicines however are not always essentially necessary for a correction of this condition. Many little things will materially aid and ultimately succeed in overcoming this tendency or habit. By giving attention to the character of food and its preparations, regularity of eating, out of door exercise, and the amount of water taken in twenty-four hours, this function can oftimes be so regulated as to subserve the purposes intended by nature. The amount of water consumed in twenty-four hours is a very important factor in influencing our physical well being, and yet it receives as a general rule, but little attention or consideration. In response to your inquiries regarding the amount of water consumed daily by your patients, the almost universal reply will show the amount to be far short of the necessary quantity. This is so generally the case that too often fever patients do not drink a sufficient amount of water simply because they have not been in the habit of doing so. The majority of persons do not take a sufficient amount of water in the twenty-four hours to assist in flushing their sewer system as it should be done. The drinking of an adequate quantity of water daily, thereby stimulating the activity of the kidneys, bowels and skin will contribute in no small way toward securing that standard of physical well being so much desired and sought for.

On the subject of correct breathing the average individua is woefully benighted. Few who have not received some instructions concerning this bodily function, understand its importance or can comprehend the vast benefits to be secured to the individual from the proper emptying and filling of the lungs. The great importance of proper respiration can be readily appreciated when we stop for a moment and consider that it is the one function—the heart excepted—upon the soundness of which all physical development or culture of any character whatsoever depends. Pulmonary gymnastic exercises have been strongly recommended as assisting in eliminating from the blood many of the poisonous products arising from oxidation processes, as well as having a more beneficial effect upon the physical organization of those individuals supposedly prone to lung affections—this by the opening up of and bring into use portions of the lung tissue which in ordinary respiration remain quiescent, thereby furnishing the body with a more nutritious blood.

Regarding eating some one has aptly said the human race would be better off if it would follow the Chinese maxim of eating to live, rather than that of the French idea of living to eat. Unquestionably we eat too much, more than the system requires and the human economy can care for without injury to itself. By cutting off the evils, immediate and remote, arising from this source, the physical well being of many individuals would be greatly improved. Bathing of of the body is another one of the small affairs which is frequently neglected. In most cases this neglect is due to a failure of the individual to realize the important role the skin performs in ridding the body of waste products, and thereby assisting in maintaining a good physical condition. Education and the erection of public baths are doing much toward correcting this neglect.

Education regarding how to live, and the physiological functions of the body with the gymnasium and encouragement of out door exercise are doing much toward improving the physical standard which has to a certain extent been secondary in consideration to the development of the intellect.

Physical inactivity is one of the serious afflictions of modern life. Few persons wear out from over physical activity; over-eating and inactivity form a combination that will eventually bankrupt any good physique.

Every individual is prone to consider himself an exception a general rule that governs or is applied to the masses particularly regarding his physical organization, and therefore often is inclined to imagine or act as if he thought he could take liberties with his constitution which in others he would censure and condemn.

The recollection of college days brings to my mind the terse reply that that grand old professor of Theory and Practice, J. Adams Allen, gave to an inquirer after truth and knowledge who desired to know how he could avoid sickness. "Uncle" Allen's advice was to keep the head cool, the feet warm, bowels open and fear God.

The time comes however when we all have to pay the penalty by the showing of decrepitude in some part, and too often upon looking back we find the foundation was laid in the failure to observe some of the small or trifling affairs of every day life which contribute in no small way to our general physical well being.

ITEMS OF INTEREST.

Professor N. Senn returned to Chicago August 11, after a season's shooting in Texas.

Dr. P. P. S. Doane has returned from an outing at Harbor Point, Mich.

Prof. Hektoen has returned from a three weeks outing in Massachusetts.

Dr. Wells has gone for several weeks vacation at his New Haven, Conn. home.

MEDICAL BOOKS.

We beg to announce that we have opened a West Side Depot at N. W. Corner Wood and Congress Streets (opp. Presbyterian Hospital), F. W. King, Manager, where we shall have on sale a complete line of Medical and Dental books.

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A LETTER FROM TIENSIN, CHINA.

C. J. Rowan, Rush '94. A. A. Surg. U. S. Army—U. S. General Hospital, Teinsin, China, August 19, 1900.

I am assigned to permanent duty here, probably as long as the U. S. troups remain in China, and nothing could satisfy me better. We are the base hospital for all the U. S. forces in China, with 400 beds which we keep filled with good cases, for as soon as the patients are able to be moved we send them down to the hospital-ship "Relief" in Taku Bay. All the wounded are sent here directly from the front with only "first aid dressing," as there are no facilities for operating there: there are five surgeons here, and after the Yang Tsuse fight we operated without rest for over 24 hours. There is more operating than you would imagine, as fully one-half of the wounds are shell and shrapnel. After the Yang Tsun fight we had thirty shell wounds due to the English who fired on our men by mistake and acknowledged the coin afterwards by apologizing. The gunshot wounds do not require operating but nearly every shell and shrapnel wound does. We have had only four deaths from steel-clad bullets, two were abdominal wounds and they died on their way here from the front; the other two were wounds of the spinal cord which was completely severed in both instances. One case was located at the fourth dorsal vertebra and the patient lived three days and developed a temperature of 106° before death, while (curiously enough) the other, which involved the fourth cervical was fatal in five days and had no rise of temperature before death—(contrary to our observations of injuries to the spinal cord high in the cervical region).

We post every case within an hour after death, and have every facility for pathological work. Two of the wounds required amputation and several required resection of a joint. One thing that makes shell wounds more serious is that the patient is often struck by two or more pieces of the shell. We have one patient who lost his entire under jaw, his nose, most of his right upper maxilla, and in addition had a large piece of shell in his knee joint. He is still alive a week after the injury and bids fair to recover. I am surprised at the small amount of suppuration we get, and account for it by the fact that aseptic first aid dressing is done immediately on the field, so that when the patients reach here where we have all the aseptic and antiseptic appointments of a well regulated hospital at home, they have not had much chance of being infected. In addition there was no pus about this hospital to begin with, as the buildings we are using were formerly occupied by the American Missionaries of Tientsin.

As yet I have met no other Rush Alumnus in the army, but I notice very often when we are discussing a wound or an operation, I am asked what Senn's procedure would be in the case.

Our medical cases are for the most part dysenteric, due to the fact that the front are compelled to drink the Pei-ho river water, which is bad enough in time of peace and made much worse now by the numerous decomposing bodies of Chinese. As the troops are continuously advancing there is no means of boiling the water, and we have so little means of transportation as yet, that we cannot send them boiled water. We also drink the Pei-ho water, but it is boiled first and even then is almost nauseating, especially if one holds it up to the light before drinking.

Yesterday at dinner our chief surgeon claimed that he could see both muscular and connective tissue in it. We are also careful not to breathe while drinking, as the odor is altogether too characteristic. There is a pontoon bridge just below the hospital, the two middle pontoons of which had to be removed for a couple of hours the other day in order to let the dead bodies through as they threatened to block the river. On the 14th inst. I was in command of a detail to convey sixty of our convalescing wounded to the Relief in Taku Bay. The distance is about sixty miles and I was sixty hours away from the hospital. You can have no conception of the difficulties of traveling here on account of the poor means of transportation and the many different languages spoken. In the evening when I am not too busy I sometimes walk down to the sixth cavalry camp where I have several friends among the officers, and on my return I am challenged by sentries in five different tongues. (Japanese, English, German, Russian and French). The English troups here are from India (Sikhs, Punjahs and royal engineers) and two regiments from Hong Kong. The Japs are the heroes of the war so far. They show wonderful bravery, and have perfect discipline and organization. The English, Japs and Americans fraternize together, while the Russians and French are like brothers.

The Japs have two hospitals here, and the other nations have one each. Our mail is uncertain. The Russians are making the railroads, the Americans the telegraph, while the Japs are in charge of the post office.

(I enclose a piece of a Boxer proclamation, which I found on the wall of a house in the walled city). Most of the Chinese have a flag on their house or a card stating that they are under the protection of some government The card on a door reads: "This very good man," and strange to say, not even the Russians were wicked enough to loot his house after seeing that.

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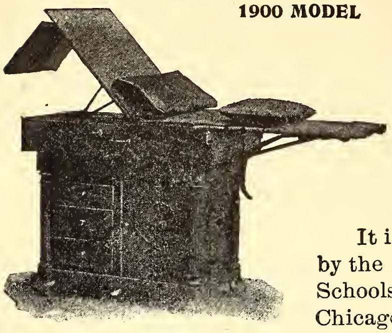
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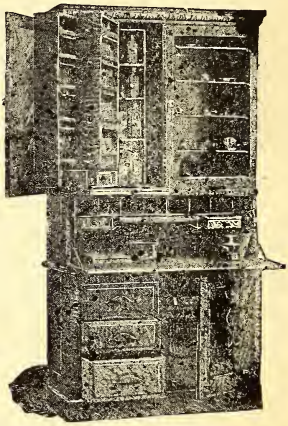
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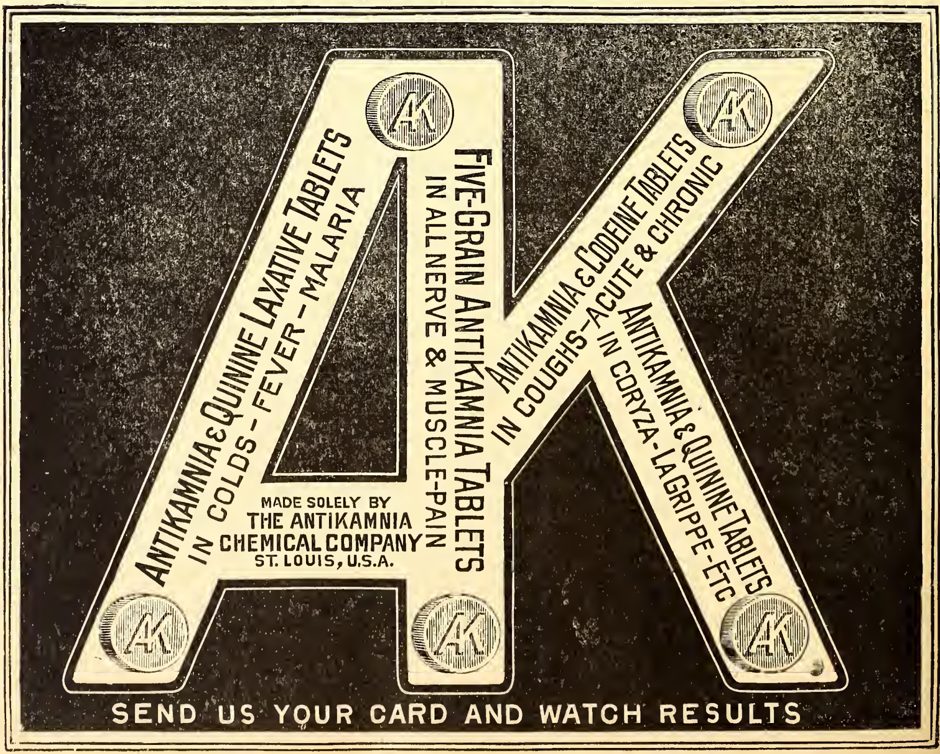
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